



Deposited via The University of Sheffield.

White Rose Research Online URL for this paper:

<https://eprints.whiterose.ac.uk/id/eprint/184578/>

Version: Accepted Version

Article:

Yang, W.-N., Johnson, S. and Niven, K. (2018) "That's not what I signed up for!" A longitudinal investigation of the impact of unmet expectation and age in the relation between career plateau and job attitudes. *Journal of Vocational Behavior*, 107. pp. 71-85. ISSN: 0001-8791

<https://doi.org/10.1016/j.jvb.2018.03.006>

© 2018 Elsevier. This is an author produced version of a paper subsequently published in *Journal of Vocational Behavior*. Uploaded in accordance with the publisher's self-archiving policy. Article available under the terms of the CC-BY-NC-ND licence (<https://creativecommons.org/licenses/by-nc-nd/4.0/>).

Reuse

This article is distributed under the terms of the Creative Commons Attribution-NonCommercial-NoDerivs (CC BY-NC-ND) licence. This licence only allows you to download this work and share it with others as long as you credit the authors, but you can't change the article in any way or use it commercially. More information and the full terms of the licence here: <https://creativecommons.org/licenses/>

Takedown

If you consider content in White Rose Research Online to be in breach of UK law, please notify us by emailing eprints@whiterose.ac.uk including the URL of the record and the reason for the withdrawal request.

**'THAT'S NOT WHAT I SIGNED UP FOR!' A LONGITUDINAL INVESTIGATION
OF THE IMPACT OF UNMET EXPECTATION AND AGE IN THE RELATION
BETWEEN CAREER PLATEAU AND JOB ATTITUDES**

Career plateau is often associated with undesirable outcomes, but the reasons for this remain unclear. The current study adopts a three-wave longitudinal design to explore a potential mechanism of the negative effects of career plateau on job attitudes. Drawing on psychological contract theories, we hypothesised that unmet expectations would mediate the effects of two key forms of career plateau, namely hierarchical plateau and job content plateau. Regression analysis on 87 individuals over an 8-month period revealed only one main effect, with job content plateau associated with lower job satisfaction. However, there were indirect effects of both types of plateau on job satisfaction and turnover intentions, and indirect effects of hierarchical plateau on organisational commitment, via unmet expectations. Although the experience of career plateau was positively related to workers' age, the mediated effects of career plateau on job attitudes were observed irrespective of workers' age. This study contributes to the field by offering a new explanation as to why plateaued individuals develop unfavourable job attitudes and by suggesting that organisations need to be mindful of the damaging effects of career plateau for employees of all ages.

Keywords: Career plateau, hierarchical plateau, job content plateau, unmet expectations, age, longitudinal research

**'THAT'S NOT WHAT I SIGNED UP FOR!' A LONGITUDINAL INVESTIGATION
OF THE IMPACT OF UNMET EXPECTATION AND AGE IN THE RELATION
BETWEEN CAREER PLATEAU AND JOB ATTITUDES**

Career plateau describes a stage in the career in which a person perceives a low likelihood of receiving a formal promotion or additional challenges in his or her job role (Bardwick, 1986; Ference, Stoner, & Warren, 1977). It has been a subject of research for nearly 40 years and research interest in this area has continued growing over the years.

One reason why the topic of career plateau continues to fascinate is that reaching a state of plateau is likely to be a reality for the majority of workers. As organisations are more commonly structured into flatter hierarchies, in order to reduce costs and promote efficiency, workers are experiencing more intense competition for fewer promotion opportunities (Appelbaum & Finestone, 1994; Chao, 1990; Lapalme, Tremblay, & Simard, 2009). Traditional views of careers, where people are expected to advance hierarchically until retirement, therefore no longer seem to exist (Bown-Wilson & Parry, 2013). Rather, the majority of workers are likely to remain in the same position for a longer period of time (Nachbagauer & Riedl, 2002), and thus may be susceptible to *hierarchical plateau*, which refers to a point in a person's career where he or she perceives low likelihood of further promotions (Ference et al., 1977). The uncertain end to the worldwide economic crisis and lack of job alternatives has also left many people underemployed, having accepted jobs for which they are overqualified and normally would not agree to take (Erdogan & Bauer, 2011; Thompson, Shea, Sikora, Perrewé, & Ferris, 2013). As such, people are accepting or staying in less challenging jobs (Kahn, 1992 ; Thompson et al., 2013), making them susceptible to reaching a *job content plateau*, wherein they perceive a low likelihood of receiving new challenges in their role (Bardwick, 1986).

By definition, a career plateau does not imply any negativity; it is simply seen as a stage one may reach in one's career (FERENCE et al., 1977). Yet prior research shows a high level of concordance in suggesting that both hierarchically and job content plateaued individuals report lower job satisfaction, lower commitment to their organisations, and greater intentions to leave their organisation (e.g., Drucker-Godard, Fouque, Gollety, & Le Flanchec, 2015; Ettington, 1998; Hofstetter & Cohen, 2014; Hurst, Baranik, & Clark, 2016; Jung & Tak, 2008; Lentz & Allen, 2009; McCleese & Eby, 2006; Milliman, 1992; Wang, Hu, Hurst, & Yang, 2014). Despite such a strong pattern of findings, however, there has not been a clear explanation offered as to *why* career plateau should have such negative effects on people's job attitudes.

The main aim of the present study was therefore to investigate a potential mechanism explaining the relationship between career plateau and unfavourable job attitudes. The explanation we propose draws from psychological contract theory and focuses on the idea that unmet expectations about promotion and challenge in one's role might be responsible for the detrimental effects of career plateau. We focus on three key job attitudes that career plateau is likely to influence, based on the accumulated prior research: job satisfaction (i.e., the degree to which a person is content and positive about the job (Judge & Kammeyer-Mueller, 2012)), organisational commitment (i.e., a person's psychological connection with the organisation (Solinger, van Olffen, & Roe, 2008)), and turnover intentions (i.e., a person's conscious and intended will not to remain with the organisation (Tett & Meyer, 1993)).

A secondary aim of the study was to explore the role played by age in people's experiences of career plateau. Age has almost always been a control variable in career plateau studies, which indicates that in some way it may affect the plateauing experience. Even so, there has been little discussion on whether, or how, age is relevant to career plateau. The unresolved debate of whether people's desires and expectations towards receiving promotion or job challenge change as they become older leads us to also investigate whether age could

moderate the strength of the mediated relationship between career plateau and job attitudes via unmet expectations.

We test our propositions using a longitudinal research design, thus providing a more stringent test of the causal order of the relationships between career plateau, employee expectations, and job attitudes than in most previous research in the area. The proposed model is displayed in Figure 1 and is discussed below.

INSERT FIGURE 1 ABOUT HERE

Theory and Hypotheses

Career Plateau and Job Attitudes

There is an ample amount of cross-sectional research evidence suggesting that career plateau has a negative influence on job attitudes. Firstly, career plateau has been associated with job satisfaction. Employees who perceive themselves to be hierarchically plateaued report lower job satisfaction (Chao, 1990; Ettington, 1998; Godshalk & Fender, 2015; Milliman, 1992; Tremblay, Roger, & Toulouse, 1995), as do those who perceive themselves to be job content plateaued (Drucker-Godard et al., 2015; Lentz & Allen, 2009; McCleese & Eby, 2006; Milliman, 1992). A study by T. D. Allen, Poteet, and Russell (1998) also reported that job content plateaued managers expressed more job dissatisfaction than hierarchically plateaued managers. Secondly, reaching career plateau lowers employees' organisational commitment. Studies from Milliman (1992) and Lemire, Saba, and Gagnon (1999) both showed that hierarchical plateau and organisational commitment are negatively related, while several other studies suggest that this negative relationship also holds true for job content plateaued individuals (Godshalk & Fender, 2015; Jung & Tak, 2008; Lentz & Allen, 2009; McCleese & Eby, 2006; Nachbagauer & Riedl, 2002). Finally, career plateau has been found to be associated with employees' turnover intentions. Milliman (1992), Lemire et al. (1999) and Xie,

Lu, and Zhou (2015) all found that the more employees perceive themselves to be hierarchically plateaued, the more likely they are to leave their organisations. Recent studies have also reported similar findings with regard to job content plateau (Drucker-Godard et al., 2015; Lentz & Allen, 2009; Wang et al., 2014). Based on this research evidence, we propose the following hypotheses:

Hypothesis 1 Hierarchical plateau will be negatively related to (a) job satisfaction and (b) organisational commitment, and positively associated with (c) turnover intentions.

Hypothesis 2 Job content plateau will be negatively related to (a) job satisfaction and (b) organisational commitment, and positively associated with (c) turnover intentions.

Career Plateau, Unmet Expectations, and Job Attitudes

Although a great deal of research has explored associations between career plateau and job attitudes, there has been little attempt to understand the mechanisms responsible for these relationships. In other words, why do plateaued employees experience less satisfaction with their job and have less commitment to their organisation and greater intention of leaving? A potential answer to this question concerns employees' unmet expectations, i.e., the perceived gaps between what employees expect to encounter and what they actually experience in their jobs (Porter & Steers, 1973).

The link between unmet expectations and poor job attitudes has been well established within the psychological contract literature. Employees' expectations are thought to be the basis on which the psychological contract is formed (Levinson, Price, Munden, Mandl, & Solley, 1962). By having mutual expectations of receiving inducements from each other, both employees and employers are motivated to perform to a satisfactory level (Cropanzano & Mitchell, 2005; Levinson et al., 1962). For employees, such inducements could include receiving promotions within the organisation or being assigned challenging tasks and new responsibilities (Low, Bordia, & Bordia, 2016; Van Vianen, De Pater, & Preenen, 2008). However, employees' job attitudes would suffer if these expectations are not fulfilled. In a

meta-analysis, Wanous, Poland, Premack, and Davis (1992) found that unmet expectations were negatively associated with job attitudes and behaviours, including lower job satisfaction, decreased organisational commitment, reduced job performance, and increased turnover intention. A recent study by Maden, Ozcelik, and Karacay (2016) also confirmed that unmet job expectations are predictive of low job satisfaction and high turnover intentions.

Associations between career plateau and unmet expectations might also be anticipated. According to the psychological contract literature, employees consider it the employer's obligation to provide a job that is stimulating and challenging (Low et al., 2016) and expect employers to provide steady career advancements via promotions (FERENCE et al., 1977; Low et al., 2016). Therefore, when employees reach a hierarchical plateau, expectations towards receiving promotions are diminished. This is similar for reaching a job content plateau, whereby employees realise that the expectations to be provided with continual job challenge by their employer are not being met. Thus, reaching either hierarchical or job content plateau suggests that there will be perceptions of unmet expectation of receiving promotion (for hierarchical plateaued individuals) or of receiving challenging tasks (for job content plateaued individuals).

On the basis of the theoretical evidence discussed above, we suggest that employees are motivated to contribute to their organisation with the expectation of receiving promotion or more challenging tasks in the future. Becoming plateaued suggests that such expectations are no longer being fulfilled (Bardwick, 1986; Drucker-Godard et al., 2015; Kormanik, 2008), therefore resulting in less satisfaction with one's job, less commitment to one's organisation, and a greater intention of leaving the organisation (Maden et al., 2016; Wanous et al., 1992). Consequently, we propose the following hypotheses:

Hypothesis 3 Unmet expectations of receiving promotion mediate the relationship between hierarchical plateau and (a) job satisfaction, (b) organisational commitment, and (c) turnover intentions.

Hypothesis 4 Unmet expectations of receiving challenging tasks mediate the relationship between hierarchical plateau and (a) job satisfaction, (b) organisational commitment, and (c) turnover intentions.

The Role of Age

Within the career plateau literature, age has received surprisingly little attention. However, it is possible that age is a relevant factor in influencing the effects of career plateau on job attitudes.

One way in which age may prove to be a relevant factor is with regards to the experience of career plateau. In early studies in the area, researchers actually used chronological age as a means for measuring career plateau, using the somewhat arbitrary cut-off of age 40 or 45 as criterion to differentiate plateaued employees from non-plateaued (e.g., Appelbaum & Finestone, 1994; Evans & Gilbert, 1984; Veiga, 1981). The assumption underlying this research was that younger workers are more likely to receive formal promotions and new challenges in their work, and thus that they would be far less likely to reach a stage of plateau. For this reason, many career plateau studies have even restricted participation to workers who are at least middle-aged (Ettington, 1998; Lemire et al., 1999; Tremblay & Roger, 1993; Zaremba, 1994). Thus, it might be the case that the career plateau is only experienced by older workers. However, an alternative perspective is that career plateau may be experienced at any age. According to this perspective, the increasingly unstable working environment means that workers are more likely to reach plateau during the early years of their career (T. D. Allen, Russell, Poteet, & Dobbins, 1999), and so younger as well as older workers may experience career plateau (Ettington, 1998; Greenhaus, 2002; Milliman, 1992).

A second way in which age may be salient concerns its possible influence on the extent to which career plateau is damaging for workers. It is well established that people's priorities change across the lifespan and that employees' expectations from their organisations may

likewise change (Schalk, 2004). For example, the motivation literature suggests that extrinsic motivators such as monetary benefits or promotion tend to lose their attractiveness as employees age (Kanfer & Ackerman, 2004), suggesting that formal promotions may become less important to workers the older they become. Kanfer and Ackerman (2000) further suggest that older workers have significantly less desire to learn new things at work and in their meta-analysis, Kooij, Lange, Jansen, Kanfer, and Dikkers (2011) found that individuals' 'growth motives', including the motivation to take on further development challenges, decrease as they age. Additionally, the career literature such as Super's (1980) Career Development Theory suggests that employees in their early career stage tend to have the highest promotion aspiration (e.g., the establishment stage; Super, 1980), but as they age, such desire is replaced by directing more attention to maintaining the recognition they previously achieved (e.g., the maintenance stage; Super, 1980). Take together, reaching a stage of hierarchical or job content plateau may be more likely to lead to unmet expectations (and in turn, to unfavourable job attitudes) for younger rather than older workers. On the contrary, another group of researchers argue that career stage does not necessarily reflect chronological age in the contemporary career (De Vos, Dujardin, Gielens, & Meyers, 2016; Low et al., 2016), and that older workers may still expect further promotions. Likewise, several studies suggest that employees desire job challenge regardless of their age (e.g., Bardwick, 1986; Bown-Wilson & Parry, 2013; De Lange, Taris, Jansen, Kompier, & Houtman, 2005; Taneva, Arnold, & Nicolson, 2016).

Given these debates, which suggest different potential conclusions about the role age might play in career plateau, we propose two exploratory research questions concerning whether workers' age influences career plateau:

Research question 1 Is the experience of career plateau related to worker age?

Research question 2 Does worker age moderate the mediated effect of career plateau on job attitudes via unmet expectations?

Method

Participants and Procedure

A three-wave study design was adopted, in which measures of independent (career plateau), mediating (unmet expectations), and dependent (job attitudes) variables were all taken at three different time points. This study design was chosen due to the mediation model we were proposing, which suggests a clear causal order of variables (e.g., Demerouti, Bakker, & Bulters, 2004; Tims, Derks, & Bakker, 2016). A period of four months was chosen to separate each of the measurement points, based on the previous study of unmet expectations and job attitudes by Fisher (1985), which confirmed that this time interval is appropriate for expectations to have an effect on job attitudes.

Data were collected via an online questionnaire. Three approaches were used to obtain participants: (1) open invitations on social media websites and through advertisements in public areas in Manchester, UK, (2) contacting members of the research teams' personal networks, and (3) asking these personal connections to forward the survey link to three to five working individuals. The only criteria for taking part in the study was that participants had to be working at the time of invitation and could not be self-employed. Both part-time and full-time workers were invited to take part because both have been found to experience career plateau (Palmero, Roger, & Tremblay, 2001). To encourage participation, a brief report of the results and a prize draw of several £100 worth of online vouchers were offered. Participants were assured that their responses would be anonymous and confidential.

Responses across the three time points were matched using participants' e-mail addresses and the online survey generator Qualtrics. The software was able to generate and send individualised survey links for each participant with the availability of the e-mail address, allowing the responses to be linked across all time points. A total of 523 responses were received for the Time 1 survey. Of the original sample, 110 participants completed the Time 2 survey (21%), and of these, 89 participants took part in the Time 3 survey (81%). Of the 89

respondents who completed all three questionnaires, two were excluded because they became unemployed during the study. To understand whether there were significant differences on study variables between individuals who completed all three surveys and those who dropped out, a binary variable was created to indicate whether participants at Time 1 were 'stayers' (who completed all three surveys) or 'leavers' (who completed only one or two of the surveys). We used this as a grouping variable in an independent sample t-test and found that there was no significant mean difference on any of the main study variables between stayers and leavers (hierarchical plateau: $t = -1.24, p = .22$; job content plateau: $t = -.59, p = .56$, unmet expectations of promotion: $t = .58, p = .56$; unmet expectations of challenge: $t = .03, p = .97$; job satisfaction: $t = .42, p = .67$; organisational commitment: $t = .73, p = .47$; turnover intentions: $t = -.51, p = .61$).

The final sample of 87 participants who completed all three surveys came from various industries (e.g., public services, healthcare, manufacturing, and professional services) in various countries (e.g., United Kingdom, Taiwan, United States of America, China and Japan) and consisted of 58 female participants (66.7%) and 29 males (33.3%). Overall they have achieved high education degrees, with 50 participants (57.5%) stating they had a postgraduate degree, and 28 participants (32.2%) reporting an undergraduate degree. They were aged between 19 and 61 years. The average age was 34.31 years ($SD = 10.25$) and the average job tenure was 2.42 years ($SD = 2.84$). The majority of participants worked full-time (96.6%) and held university degrees (89.7%). In terms of work level, 56 participants (64.4%) held non-managerial positions, while 23 participants were middle managers (26.4%) and 6 participants (6.9%) were senior managers.

Measures

Career plateau. Hierarchical plateau and job content plateau were measured using Milliman's (1992) career plateau scales, which are the measures typically used in contemporary career plateau studies (e.g., Jiang, 2016; Lentz & Allen, 2009; Wang et al., 2014). Both types

of plateau were measured using six items, on a 5-point scale (1 = *strongly disagree*, 5 = *strongly agree*). In order to stay true to Ference et al.'s (1977) original definition of career plateau as an objective career stage relating to perceptions about current and future opportunities – and thus to avoid conflating plateau with one's expectations – the three items from Milliman's (1992) hierarchical plateau scale that made explicit reference to expectations were adapted. For instance, the item "I *expect* to be promoted frequently in the future" was adapted to "I *will* be promoted frequently in the future." Similarly, one item of the job content plateau scale was adapted: "I *expect* to be constantly challenged in my job" was changed to "I *will* be constantly challenged in my job." The Cronbach's alpha coefficients for the adapted scales across the three time points ranged between .89 and .93 for hierarchical plateau and between .85 and .90 for job content plateau.

Unmet expectations. New scales were developed to assess unmet expectations of receiving promotion and challenging tasks, based on existing measures of met and unmet expectations (e.g., Lait & Wallace, 2002; Meyer, Bobocel, & Allen, 1991; Robinson, 1996), promotion expectations (e.g., Schaubroeck & Lam, 2004), and job challenge (e.g., Ettington, 1998; Preenen, 2010; Zeitz, Johannesson, & Ritchie, 1997). Six items assessed unmet expectations of receiving promotion (e.g., "I have not advanced as quickly in this organisation as I initially anticipated.") and five items assessed unmet expectations of receiving challenging tasks (e.g., "My work content is more repetitive than I had originally expected."), on a 7-point scale (1 = *strongly disagree*, 7 = *strongly agree*). Cronbach's alpha coefficients for the two newly-developed scales across the three time points ranged between .84 and .89 for unmet expectations of promotion and between .76 and .84 for unmet expectations of challenge. The items of these two scales are presented in Appendix 1.

With regards to the validity of the new scales, and to further ensure that they were distinct from the career plateau scales we used in the study, Confirmatory Factor Analysis using Mplus 8.0 (Muthén & Muthén, 1998-2017) was performed on the data collected at Time 1 ($N = 523$).

A four factor model was specified, predicated on the notion that each unmet expectations and career plateau measure would be tapping into a unique construct. The model was assessed using a combination of three indices. A model with a good fit should achieve (1) RMSEA that is close to or lower than .06, (2) CFI and TLI that are close to or higher than .95, and (3) SRMR that is close to or lower than .08 (Hu & Bentler, 1999). Results showed that the four-factor model fit was adequate ($\chi^2 = 580.8$, $df = 219$, $p < .001$, CFI = .95, TLI = .95, SRMR = .05, RMSEA = .06), and had superior model fit than a two-factor model (combining all career plateau items into one factor and all unmet expectations into the other: $\chi^2 = 1816.58$, $df = 224$, $p < .001$, CFI = .79, TLI = .76, SRMR = .12, RMSEA = .12) and a three-factor model (hierarchical plateau and job content plateau as two factors and all unmet expectations items as one factor: $\chi^2 = 825.13$, $df = 222$, $p < .001$, CFI = .92, TLI = .91, SRMR = .08, RMSEA = .07). This provides evidence of the distinctiveness of the four constructs.

Job satisfaction. Job satisfaction was measured using Cammann, Fichman, Jenkins, and Klesh's (1983) three-item scale with a 7-point scale (1 = *strongly disagree* to 7 = *strongly agree*). An example item is "All in all, I am satisfied with my job." Cronbach's alpha across the three time points was .90.

Organisational commitment. Organisational commitment was measured on a 7-point scale (1 = *strongly disagree* to 7 = *strongly agree*), using four items from Allen and Meyer's (1990) affective commitment scale. An example item for this scale is, "I really feel as if this organisation's problems are my own." Cronbach's alpha across the three time points ranged between .84 and .90.

Turnover intentions. Three items developed by Lentz and Allen (2009) were used to measure turnover intentions. Participants were asked to rate their intentions to leave the organisation on a 5-point scale (1 = *strongly disagree*, 5 = *strongly agree*). In this scale, a higher score suggests that individuals have stronger intentions to leave their organisations, which indicates a more negative job attitude. An example item is "I am currently looking for

another organisation to work for." Cronbach's alpha across the three time points ranged between .85 and .91.

Control variables. Gender and job tenure were controlled for in this study since they have been common control variables in nearly all of the career plateau studies. Both variables have been found to be related with the two forms of career plateau (e.g., T. D. Allen et al., 1998; Chao, 1990; McCleese & Eby, 2006).

Results

Descriptive statistics, Cronbach's alphas, and intercorrelations for the study variables at all three time points are presented in Table 1. Intercorrelations were generally in line with our hypotheses.

INSERT TABLE 1 ABOUT HERE

Effects of Career Plateau on Job Attitudes

To test the hypotheses, we included the independent variables (hierarchical plateau, job content plateau) collected from Time 1, the mediating variables (unmet expectations of receiving promotion, unmet expectations of receiving challenging tasks) from Time 2, and the dependent variables (job satisfaction, organisational commitment, turnover intentions) from Time 3 in the analysis. While a more robust analytic strategy would be to test a change model (thus including variables at all three time points in the analysis), our matched sample size of 87 participants precluded this kind of analysis. A similar analytic approach has been taken by Bai, Lin, and Wang (2016), and Lapointe, Vandenberghe, and Boudrias (2013) have suggested this to be an appropriate way of testing causally specified mediation models.

Given the sample size for our causal model, we tested our hypotheses using multiple regression analysis. Regression analysis was performed to examine the main effects, direct effects, and indirect effects using PROCESS (Hayes, 2013), a regression-based SPSS add-on

developed to analyse mediation and moderation models. PROCESS allowed us to test the direct and indirect effects of career plateau on job attitudes via unmet expectations, and the conditional indirect effects with age as a moderator. With respect to mediation, this study follows procedures recommended by Preacher and Hayes (2004), who proposed two criteria to establish a mediated effect. First, an effect to be mediated exists, in other words, the main effect (the pathway from the independent variable to the dependent variable) should not be equal to zero. Second, an indirect effect (namely the product of the pathway from the independent variable to the mediator (path *a*) and the pathway from the mediator to the dependent variable (path *b*) must be significant, and in line with the hypothesised direction.

Regression analyses results, displayed in the left hand column of Table 2, demonstrated that Time 1 hierarchical plateau was positively related to Time 2 unmet expectations of receiving promotions ($\beta = .28, SE = .11, p < .05$), and that Time 2 unmet expectations of receiving promotion was negatively related to Time 3 job satisfaction ($\beta = -.41, SE = .10, p < .01$) and organisational commitment ($\beta = -.34, SE = .10, p < .01$), and positively related with Time 3 turnover intentions ($\beta = .47, SE = .10, p < .01$). None of the main effects between Time 1 hierarchical plateau and all Time 3 job attitudes were significant (job satisfaction: $\beta = -.19, SE = .11, p > .05$, organisational commitment: $\beta = -.19, SE = .11, p > .05$, turnover intentions: $\beta = .08, SE = .11, p > .05$), suggesting that Hypotheses 1a, 1b, and 1c were not supported as there was no evidence for direct effects of hierarchical plateau on job attitudes. However, all three of the paths were not equal to zero, meaning that the first criterion of testing mediation effect was met. The indirect effects of hierarchical plateau were estimated using bootstrapping technique (with 5,000 resamples), with a 95% confidence interval, as recommend by Preacher and Hayes (2004, 2008). Mediation effects exist if *ab* is significant, or statistically different from zero. Results showed that the indirect effects of Time 1 hierarchical plateau on Time 3 job attitude variables via Time 2 unmet expectations of receiving promotion were all significant (job satisfaction: $ab = -.11, 95\% \text{ Confidence Interval (CI) } [-.24, -.03]$; organisational

commitment: $ab = -.09$, 95% CI [-.21, -.02]; turnover intentions: $ab = .13$, 95% CI [.03, .25]). Therefore, Hypothesis 3a, 3b and 3c were all supported. This suggests that individuals' unmet expectations of receiving promotion fully explain the negative job attitudes of hierarchically plateaued individuals.

The regression analysis results for the model for job content plateau are illustrated in the right-hand column of Table 2. Time 1 job content plateau had a positive relationship with Time 2 unmet expectations of receiving challenging tasks ($\beta = .62$, $SE = .09$, $p < .01$), which relates negatively with Time 3 job satisfaction ($\beta = -.34$, $SE = .13$, $p < .01$). In this case, the main effect of Time 1 job content plateau on Time 3 job satisfaction was significant ($\beta = -.24$, $SE = .11$, $p < .05$), in support of Hypothesis 2a. However, there were no significant effects of job content plateau on the other job attitudes (organisational commitment: $\beta = -.05$, $SE = .11$, $p > .05$, turnover intentions: $\beta = .18$, $SE = .11$, $p > .05$), meaning that Hypotheses 2b and 2c were not supported. Nevertheless, the paths between job content plateau and job attitudes were all not equal to zero, meaning that the first step to examine mediation was met (Preacher & Hayes, 2004). The indirect effects of job content plateau on the job attitudes via unmet expectations of receiving challenging tasks were significant on job satisfaction ($ab = -.21$, 95% CI [-.37, -.05]) and turnover intentions ($ab = .16$, 95% CI [.01, .34]), but not on employee organisational commitment ($ab = -.09$, 95% CI [-.28, .08]). Thus, Hypothesis 4a and 4c, but not Hypothesis 4b, were supported, which suggests that content plateaued employees' lower job satisfaction and higher turnover intentions can be explained by their unfulfilled expectations toward job challenge.

INSERT TABLE 2 ABOUT HERE

The Role of Age

Research Question 1 asked if workers' experience of career plateau was influenced by age. Intercorrelations shown in Table 1 suggested that age was positively related to hierarchical plateau but not job content plateau at each of the three time points. An equivalent analysis divided the Time 1 participants ($N = 523$, age 19 to 69 years, $M = 35.21$ years, $SD = 9.41$) into different age groups mirroring the career stages in Super's (1980) Career Development Theory (see also Slocum Jr & Cron, 1985). Results of a one-way analysis of variance (ANOVA) indicated a significant effect of age group on hierarchical plateau [$F(2, 520) = 18.91, p = 0.00$]. Post-hoc comparison using the Scheffe's Test suggested that participants in the maintenance stage group (aged over 44 years old, $N = 88$) had the highest mean score of hierarchical plateau ($M = 3.72, SD = .93$), followed by the establishment stage group (aged between 31 and 44 years old, $N = 232; M = 3.30, SD = .99$), then the trial stage group (aged below 31 years old, $N = 203; M = 2.99, SD = .94$). With regards to job content plateau, however, there was no significant mean difference between the groups [$F(2, 520) = .23, p = .80$], with mean scores for all groups ranging between 2.54 and 2.60. Together, these results suggest that older workers may be more likely to experience a state of stagnation with regards to promotions, but not with regards to challenges in their role.

To address Research Question 2, we followed the statistical procedures from Hayes (2015) to examine the conditional indirect effect of age. This effect was examined by testing the significance of the *index of moderated mediation*, which is a quantification of the effect of the moderator (i.e., age) on the indirect effect of the independent variable (i.e., career plateau) on the dependent variable (i.e., job attitudes) via the mediator (i.e., unmet expectations). Results from Table 3 suggest that the indirect effects of the two types of plateau on job attitudes via unmet expectations did not significantly vary according to worker age. This finding suggests that workers of all ages are therefore equally influenced by career plateau.

Discussion

Prior research has provided strong evidence that workers who reach a point of stagnation in their careers, known as career plateau, also experience a variety of negative job attitudes, including lower job satisfaction and organisational commitment, and higher intention to leave the organisation (Ettington, 1998; Lentz & Allen, 2009; Milliman, 1992; Stout, Slocum Jr, & Cron, 1988; Wang et al., 2014). However, the reasons why this career stage ought to lead to unfavourable job attitudes have yet to be explicated. In this research, we examined unmet expectations as a mediator of the effect of career plateau on job attitudes, and also explored the role that age plays in the plateau process.

Our findings revealed a lack of main effects of career plateau on job attitudes, for the most part, which suggests that career plateau, in and of itself, is not necessarily a negative phenomenon. The lack of main effects we observed stands in contrast to the body of prior research in the area and could emanate from our updated measure of career plateau, which we adapted in line with Ference et al.'s (1977) original definition of career plateau as an objective career stage that a person may reach when he or she feels that there are no further opportunities for promotion or challenge in the job role. The measures typically used in previous research have conflated the opportunities people currently have with their career expectations (e.g., "I expect to be constantly challenged in my job"; Milliman, (1992), and may therefore have been unintentionally tapping into something other the career stage of plateau, based on Ference and colleagues' accepted definition.

An alternative explanation is that the lack of main effects in our research may be due to the longitudinal study design we adopted, in which our predictor and outcome variables were measured eight months apart in time. Few studies of the effects of career plateau have used anything other than cross-sectional designs. We speculate this to be one of the reasons for our lack of direct effects, because correlations between the career plateau and job attitudes variables were observed as significant when examining data collected in the same wave (and

in a supplementary cross-sectional analysis on the Time 1 sample with control variables included in the analysis).

In our research, by separating out the objective career stage people are at (in terms of their opportunities for promotion and challenge in their role) from people's expectations about promotion and challenge and whether these have been met, we have identified a key mechanism explaining why career plateau can have negative effects on people's job attitudes. The significant indirect effects in this study confirm that hierarchically plateaued workers have more negative job attitudes not just because of the situation itself, but because such stagnation was not what they had in mind. Thus hierarchical plateau leads to unfulfilled expectations of future promotion, and it is these unmet expectations that in turn explain plateaued workers' lower satisfaction and organisational commitment, as well as higher turnover intentions. Similarly, job content plateaued workers are dissatisfied with their job and have higher intentions to change organisations as a result of expectations about the level of challenge in their role not being fulfilled.

Contrary to hypotheses, we found that unmet expectations of receiving challenging tasks did not have an indirect effect on the relationship between job content plateau and organisational commitment. The result could be attributed to 'contract replicability', which is the degree to which employees perceive whether their current psychological contract could be fulfilled elsewhere (Ng & Feldman, 2008). Ng and Feldman's (2008) study found a positive relationship between contract unreplicability and organisational commitment, and contended that if employees couldn't find a better deal elsewhere, they might remain bonded to their organisations despite unmet expectations. In connection with the present study, despite the unmet expectations of receiving challenging tasks, job content plateaued workers may maintain their commitment to their organisation perhaps because their psychological contract cannot be replicated in other companies.

With respect to age, we found that the older workers in our sample reported higher levels of hierarchical plateau. Employees in the maintenance stage (over age 44) had the highest score in hierarchical plateau provides empirical evidence for Cron (1984) and Smith-Ruig's (2009) claims that this career stage is highly associated with reaching a hierarchical plateau. It is also noteworthy that the mean scores of hierarchal plateau for both other age groups was around the mid-point of the scale (e.g., the mean hierarchical plateau for the youngest workers in the trial stage group, who were under 31, was 2.99 on a 1-5 scale), meaning that they are not particularly optimistic about getting future promotions either. This may suggest that hierarchical plateau is a prevalent phenomenon for both young and older employees, even though the perception is significantly stronger among those who are older. The lack of age differences in prevalence of job content plateau (which was only slightly lower than hierarchical plateau among the present sample, at around 2.5 on the 1-5 scale for all age groups) further suggests that workers may experience stagnation due to a lack of challenge in their role at any point during their career, in line with the findings from Allen, Russell, Poteet, and Dobbins (1999).

We are aware that the mean age (34.31 years) of our participants and the standard deviation (10.25 years) suggest that older workers in this study were aged in the mid-forties, which meant that they are middle-aged, rather than in a late career stage nearing retirement. Bearing this in mind, the findings in our exploratory analysis, in which we observed that the mediated effects of hierarchical plateau are not moderated by worker age, are in line with previous research proposing that middle age is still regarded as a stage which ought to provide promotion opportunities. For instance, researchers such as Buyens, Dijk, Dewilde, and Vos (2009) considered age 40 as a turning point for one's career. While some may have reached their peak in career at this age, others remain ambitious at work, which implies they are likely to have expectations about further advancements (Lashbrook's, (1996) study even implies that employees' promotional expectations may increase in their late forties).

We likewise observed that there was no significant conditional indirect effect of age on job content plateau. This result is consistent with other research suggesting that challenge at work is important to employees of all ages and career stages. For instance, Bardwick (1986) observed that most employees desire job challenge regardless of their age, even though very often older workers are not given challenges due to age stereotypes held by themselves and their employers. Indeed, De Lange et al. (2005) found that having challenging work environments is just as crucial for older employees as for younger employees because they do not have decreased motivation to learn new skills when compared with their younger colleagues. Hence, the negative consequences of both hierarchical and job content plateau due to unmet expectations may remain strong regardless of employee's age.

Theoretical Contributions

On a theoretical level, this study makes contributions in three main areas. The first contribution regards the nature of career plateau as an objective career stage that is independent of expectations. Ference et al. (1977) explicitly defined the career plateau as a status that is exclusive of expectations of future promotions. However, this emphasis was gradually masked by the popular use of Milliman's (1992) scales measuring subjective hierarchical and job content plateau, which included employees' future expectations of promotion and challenges in the measurement. The current study retrieves the original definition of career plateau by separating likely expectations included in Milliman's scale. This study therefore makes a major contribution to research by disentangling the previously misinterpreted linkage between career plateau and expectations.

In doing so, we further contribute by providing insight into a key mechanism through which career plateau influences job attitudes. This study provides a novel explanation that hierarchically plateaued individuals are dissatisfied with work, less committed to organisations, and intend to leave their companies because their expectation of promotion has not been met. Similarly, job content plateaued individuals are less satisfied at work and more inclined to leave

their companies because their expectation of receiving challenging work has not been met. Understanding unmet expectations to be one of the reasons behind this unfavourable relationship directs organisations to take appropriate action to eliminate the unwanted consequences of career plateau. The research we have presented also offers new scales that measure explicitly unmet expectations of receiving promotion and challenging tasks. While numerous scales have been developed to assess general unmet expectations at work and perceptions of promotion and job challenges, few scales have combined these aspects and focused specifically on the expectations of receiving promotions and job challenges.

The second theoretical contribution of this study involves adopting a longitudinal research design and offering insight into the direction of causality between career plateau and job attitudes. Our unexpected findings that both plateaus were not detrimental to employee organisational commitment and turnover intention, and that only hierarchical plateau influences employees' satisfaction, when studied over time, support Ference et al.'s (1977) point that there is nothing inherently negative about the status of being plateaued. This longitudinal study therefore raises the importance of considering the time factor when researching this area, and guides researchers to rethink the direct relationship between career plateau and job attitudes.

The third contribution of this study is to address the role that age plays in relation to career plateau. The present study unravels some of the mysteries surrounding whether age affects career plateau, and whether age leads to different responses via different degrees of unmet expectations. The findings extend our knowledge about the equally negative influence of career plateau on job attitudes over different ages, and provide empirical evidence about the prevalence of career plateau among younger as well as older working adults.

Practical Contributions

Several practical implications can be drawn from this study. In particular, the findings that employees' unmet expectations play a crucial role in explaining the negative job attitudes

of career plateaued individuals suggest that organisations need to pay attention to what employees are expecting from them. Organisations can start by avoiding making unrealistic promises about future career advancements or work content, particularly during the recruitment stage but also in subsequent career stages (Tekleab & Taylor, 2003; Zhao, Wayne, Glibkowski, & Bravo, 2007). Frequent interactions between the employer and employees are needed to ensure that gaps in expectations of each other are kept to the minimum (Nachbagauer & Riedl, 2002; Tekleab & Taylor, 2003; Zhao et al., 2007). Giving honest appraisal and providing clear feedback, for instance, are effective ways to reduce the discrepancy between employees' expectations and managers' assessments (Bardwick, 1986).

Our finding that younger and middle-aged plateaued workers are equally susceptible to negative job attitudes suggests that organisations should remove the stereotype that younger workers are immune to feelings of being plateaued. In fact, companies should not ignore any age group when managing plateaued individuals. Rather, an organisational climate that embraces age diversity should be created by providing equal training opportunities to all employees, giving equal considerations for promotion and job transferral to employees of all age groups, and making efforts to value contributions of all employees (Boehm, Kunze, & Bruch, 2014).

Limitations and Future Research

This study has several limitations. First, the relatively small sample size, although reasonable for a three-wave study (e.g., Autin, Douglass, Duffy, England, & Allan, 2017; Salanova, Llorens, & Schaufeli, 2011), prevented the use of a more comprehensive structural equation modelling technique and meant that we were unable to include more control variables that may have influenced the relationship between career plateau and the job attitudes, such as work level and organisational tenure (T. D. Allen et al., 1998; T. D. Allen et al., 1999). The sample size of the study also limited us from conducting a cross-lagged panel analysis to

understand whether reciprocal relationships are observed between career plateau and job attitudes.

Second, due to the narrow and relatively young age profile of participants, the findings are not necessarily representative of employees of all ages. Caution must therefore be applied when concluding that age does not affect the influence of career plateau on job attitudes.

Third, the reliance on self-reported data means that the possibility of socially desirable responding patterns cannot be excluded. Moreover, measuring all variables using the same self-report method could cause artificial inflation of the inter-relationships between variables. Nevertheless, self-report is the most appropriate method for assessing people's self-perceptions about their career stage, expectations, and job attitudes. Moreover, because the research was conducted independently of any particular organisation, and participation was on an anonymous basis, there is no strong reason to expect that participants would have reported anything other than their true views. The separation in time of the measurements of our independent, mediating, and dependent variables also minimises the possible threat of common method bias in this study.

This study has suggested many potential directions for future investigations. Further research exploring how other moderators influence the mediated relationships we observed would be worthwhile. One potential moderator is reasons for plateauing. Godshalk and Fender (2015) found that different reasons of reaching career plateau result in different job attitudes. Employees who have plateaued due to internal (or voluntary) reasons overall show no negative job attitudes, whereas those who have plateaued due to external reasons reported negative job satisfaction and job involvement. One explanation may be they have different levels of unmet expectations. Employees who have plateaued due to internal reasons may have fewer or no gaps in expectations because they were given the choice to remain in the same position or to have the same work content. Further research in this area would be of great help in

understanding the conditional effects that impacts career plateau on job attitudes via unmet expectations.

Another potential moderator is contract unreplicability. The negative effects of career plateau may be alleviated through unmet expectations according to the degree of perceived contract unreplicability. If plateaued individuals realise that their current psychological contract cannot be replicated or improved in other companies, unmet expectations may be viewed as more tolerable and may therefore be less likely to have a negative influence on organisational commitment and turnover intentions (Ng & Feldman, 2008; Sonnenberg & Van Zijderveld, 2014).

Finally, future research could also explore the potential intersectional impact of age with other key demographic factors, such as gender, in the career plateau process. In a qualitative study by Bown-Wilson and Parry (2013), focusing on career progression in older managers aged over 50, male and female older managers identified different motivation for career progression. This implies that older male and female plateaued workers may perceive reaching a career plateau differently. Consequently, it would be of value to compare how individuals of different age cohorts and gender have different expectations towards promotion and work content, and how they are influenced by career plateau.

Conclusion

In conclusion, this longitudinal study offers a new explanation for why individuals who have reached a career plateau report negative job attitudes: because their expectations about the promotions or challenge they would receive in their job have not been met. In addition, this study signals that this effect is observed among both younger and middle-aged workers. Organisations must therefore make efforts to ensure that employees' expectations are realistic throughout their career to avoid unfavourable job attitudes.

References

- Allen, N. J., & Meyer, J. P. (1990). The measurement and antecedents of affective, continuance, and normative commitment to the organization. *Journal of Occupational Psychology, 63*, 1-18.
- Allen, T. D., Poteet, M. L., & Russell, J. E. A. (1998). Attitudes of managers who are more or less career plateaued. *Career Development Quarterly, 47*, 159-172.
- Allen, T. D., Russell, J. E. A., Poteet, M. L., & Dobbins, G. H. (1999). Learning and development factors related to perceptions of job content and hierarchical plateauing. *Journal of Organizational Behavior, 20*, 1113-1137.
- Appelbaum, S. H., & Finestone, D. (1994). Revisiting career plateauing: Same old problems - Avant-garde solutions. *Journal of Managerial Psychology, 9*, 12-21.
- Autin, K. L., Douglass, R. P., Duffy, R. D., England, J. W., & Allan, B. A. (2017). Subjective social status, work volition, and career adaptability: A longitudinal study. *Journal of Vocational Behavior, 99*, 1-10.
- Bai, Q., Lin, W., & Wang, L. (2016). Family incivility and counterproductive work behavior: A moderated mediation model of self-esteem and emotional regulation. *Journal of Vocational Behavior, 94*, 11-19.
- Bardwick, J. M. (1986). *The plateauing trap: How to avoid it in your career...and your life*. New York: Amacom.
- Boehm, S. A., Kunze, F., & Bruch, H. (2014). Spotlight on Age-Diversity Climate: The Impact of Age-Inclusive HR Practices on Firm-Level Outcomes. *Personnel Psychology, 67*, 667-704.
- Bown-Wilson, D., & Parry, E. (2013). Career progression in older managers. *Employee Relations, 35*, 309-321.

- Buyens, D., Dijk, H. V., Dewilde, T., & Vos, A. D. (2009). The aging workforce: perceptions of career ending. *Journal of Managerial Psychology, 24*, 102-117.
- Cammann, C., Fichman, M., Jenkins, G. D., & Klesh, J. R. (1983). Assessing the attitudes and perceptions of organizational members. In E. E. L. S. E. Seashore, P. H. Mirvis & C. Cammann (Ed.), *Assessing organizational change* (pp. 71-183). New York: John Wiley.
- Chao, G. T. (1990). Exploration of the conceptualization and measurement of career plateau: A comparative analysis. *Journal of Management, 16*, 181-193.
- Cron, W. L. (1984). Industrial Salesperson Development: A Career Stages Perspective. *Journal of Marketing, 48*(4), 41-52. doi:10.2307/1251509
- Cropanzano, R., & Mitchell, M. S. (2005). Social exchange theory: An interdisciplinary review. *Journal of Management, 31*, 874-900.
- De Lange, A., Taris, R., Jansen, P. G. W., Kompier, M. A. J., & Houtman, I. (2005). Werk en motivatie om te leren: Zijn er verschillen tussen jongere en oudere werknemers? [Work and motivation for learning: Are there differences between younger and elderly employees?]. *Gedrag und Organisatie, 18*, 309-325.
- De Vos, A., Dujardin, J.-M., Gielens, T., & Meyers, C. (2016). Conceptual Framework for Sustainable Careers *Developing Sustainable Careers Across the Lifespan: European Social Fund Network on 'Career and AGE (Age, Generations, Experience)* (pp. 9-28). Cham: Springer International Publishing.
- Demerouti, E., Bakker, A. B., & Bulters, A. J. (2004). The loss spiral of work pressure, work-home interference and exhaustion: Reciprocal relations in a three-wave study. *Journal of Vocational Behavior, 64*, 131-149.

- Drucker-Godard, C., Fouque, T., Gollety, M., & Le Flanche, A. (2015). Career plateauing, job satisfaction and commitment of scholars in French universities. *Public Organization Review, 15*, 335-351.
- Erdogan, B., & Bauer, T. N. (2011). The impact of underemployment on turnover and career trajectories. In D. C. Maynard & D. C. Feldman (Eds.), *Underemployment: Psychological, Economic, and Social Challenges*. New York, NY.
- Ettington, D. R. (1998). Successful career plateauing. *Journal of Vocational Behavior, 52*, 72-88.
- Evans, M. G., & Gilbert, E. (1984). Plateaued managers: Their need gratifications and their effort performance expectations. *Journal of Management Studies, 21*, 99-108.
- Ference, T. P., Stoner, J. A. F., & Warren, E. K. (1977). Managing the career plateau. *Academy of Management Review, 2*, 602-612.
- Fisher, C. D. (1985). Social support and adjustment to work: A longitudinal study. *Journal of Management, 11*, 39-53.
- Godshalk, V. M., & Fender, C. M. (2015). External and internal reasons for career plateauing: Relationships with work outcomes. *Group & Organization Management, 40*, 529-559.
- Greenhaus, J. H. (2002). Career dynamics. In W. C. Borman, Ilgen, D.R., & Klimoski, R.J. (Ed.), *Comprehensive handbook of psychology: Vol. 12 Industrial and organizational psychology*. New York: Wiley.
- Hayes, A. F. (2013). *Introduction to Mediation, Moderation, and Conditional Process Analysis: A Regression-Based Approach*. New York, NY: The Guilford Press.
- Hayes, A. F. (2015). An index and test of linear moderated mediation. *Multivariate Behavioral Research, 50*, 1-22.

- Hofstetter, H., & Cohen, A. (2014). The mediating role of job content plateau on the relationship between work experience characteristics and early retirement and turnover intentions. *Personnel Review, 43*, 350-376.
- Hu, L.-T., & Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling, 6*, 1-55.
- Hurst, C., Baranik, L. E., & Clark, S. (2016). Job content plateaus: Justice, job satisfaction and citizenship behaviours. *Journal of Career Development, 1-14*.
- Jiang, Z. (2016). The relationship between career adaptability and job content plateau: The mediating roles of fit perceptions. *Journal of Vocational Behavior, 95-96*, 1-10.
- Judge, T. A., & Kammeyer-Mueller, J. D. (2012). Job Attitudes. *Annual review of psychology, 63*, 341-367.
- Jung, J.-h., & Tak, J. (2008). The effects of perceived career plateau on employees' attitudes: Moderating effects of career motivation and perceived supervisor support with Korean employees. *Journal of Career Development, 35*, 187-201.
- Kahn, R. L. a. B., P. (1992). Stress in organizations. In M. D. D. a. L. M. Hough (Ed.), *Handbook of industrial and organizational psychology* (Vol. 3, pp. 571-650). Palo Alto, CA: Consulting Psychologists Press, Inc.
- Kanfer, R., & Ackerman, P. L. (2000). Individual differences in work motivation: Further explorations of a trait framework. *Applied Psychology: An Interational Review, 49*, 470-482.
- Kanfer, R., & Ackerman, P. L. (2004). Aging, adult development, and work motivation. *Academy of Management Review, 29*, 440-458.

- Kooij, D. T. A. M., Lange, A. H. D. E., Jansen, P. G. W., Kanfer, R., & Dikkers, J. S. E. (2011). Age and work-related motives: Results of a meta-analysis. *Journal of Organizational Behavior, 32*, 197-225.
- Kormanik, M. B. (2008). The stalled career: Addressing an organizational undiscussable. *Advances in Developing Human Resources, 10*, 50-69.
- Lait, J., & Wallace, J. E. (2002). Stress at work: A study of organizational-professional conflict and unmet expectations. *Relations Industrielles, 57*, 463-490.
- Lapalme, M.-E., Tremblay, M., & Simard, G. (2009). The relationship between career plateauing, employee commitment and psychological distress: the role of organizational and supervisor support. *International Journal of Human Resource Management, 20*, 1132-1145.
- Lapointe, É., Vandenberghe, C., & Boudrias, J.-S. (2013). Psychological contract breach, affective commitment to organization and supervisor, and newcomer adjustment: A three-wave moderated mediation model. *Journal of Vocational Behavior, 83*, 528-538.
- Lashbrook, J. (1996). Promotional Timetables: An exploratory investigation of age norms for promotional expectations and their association with job well-being. *The Gerontological Society of America, 36*, 189-198.
- Lemire, L., Saba, T., & Gagnon, Y.-C. (1999). Managing career plateauing in the Quebec public sector. *Public Personnel Management, 28*, 375-391.
- Lentz, E., & Allen, T. D. (2009). The role of mentoring others in the career plateauing phenomenon. *Group & Organization Management, 34*, 358-384.
- Levinson, H., Price, C. R., Munden, K. J., Mandl, H. J., & Solley, C. M. (1962). *Men, Management and Mental Health*. Boston: Harvard University Press.

- Low, C. H., Bordia, P., & Bordia, S. (2016). What do employees want and why? An exploration of employees' preferred psychological contract elements across career stages. *Human Relations, 69*, 1457-1481.
- Maden, C., Ozcelik, H., & Karacay, G. (2016). Exploring employee's responses to unmet job expectations: The moderating role of future job expectations and efficacy beliefs. *Personnel Review, 45*, 4-28.
- McCleese, C. S., & Eby, L. T. (2006). Reactions to job content plateaus: Examining role ambiguity and hierarchical plateaus as moderators. *Career Development Quarterly, 55*, 64-76.
- Meyer, J. P., Bobocel, D. R., & Allen, N. J. (1991). Development of organizational commitment during the first year of employment: A longitudinal study of pre- and post-entry of influences. *Journal of Management, 17*, 717-733.
- Milliman, J. F. (1992). *Causes, consequences, and moderating factors of career plateauing*. University of Southern California: Unpublished dissertation. Los Angeles.
- Muthén, L. K., & Muthén, B. O. (1998-2017). *Mplus User's Guide*. (8th ed.). Los Angeles, CA: Muthén and Muthén.
- Nachbagauer, A. G. M., & Riedl, G. (2002). Effects of concepts of career plateaus on performance, work satisfaction and commitment. *International Journal of Manpower, 23*, 716-733.
- Ng, T. W. H., & Feldman, D. C. (2008). Can you get a better deal elsewhere? The effects of psychological contract replicability on organizational commitment over time. *Journal of Vocational Behavior, 73*, 268-277.
- Palmero, S., Roger, A., & Tremblay, M. (2001). *Work Satisfaction and Career Plateau of Part-time Workers*. Paper presented at the EGOS 17th Colloquium Lyon, Lyon.

- Porter, L. W., & Steers, R. M. (1973). Organizational work, and personal factors in employee turnover and absenteeism. *Psychological Bulletin*, *80*, 151-176.
- Preacher, K. J., & Hayes, A. F. (2004). SPSS and SAS procedures for estimating indirect effects in simple mediation models. *Behavior Research Methods, Instruments, & Computers*, *36*, 717-731.
- Preacher, K. J., & Hayes, A. F. (2008). Asymptotic and resampling strategies for assessing and comparing indirect effects in multiple mediator models. *Behavior Research Methods*, *40*, 879-891.
- Preenen, P. T. Y. (2010). *Challenge at work: A matter of give and take*. (PhD), University of Amsterdam.
- Robinson, S. L. (1996). Trust and breach of the psychological contract. *Administrative Science Quarterly*, *41*, 574-599.
- Salanova, M., Llorens, S., & Schaufeli, W. B. (2011). "Yes, I can, I feel good, and I just do it!" On gain cycles and spirals of efficacy beliefs, affect, and engagement. *Applied Psychology*, *60*, 255-285.
- Schalk, R. (2004). Changes in the employment relationship across time. In J. A. M. Coyle-Shapiro, L. M. Shore, M. S. Taylor, & L. E. Tetrick (Eds.), *The Employment Relationship: Examining Psychological and Contextual Perspectives* (pp. 284-311). Oxford: Oxford University Press.
- Schaubroeck, J., & Lam, S. S. K. (2004). Comparing lots before and after: Promotion rejectees' invidious reactions to promotees. *Organizational Behavior and Human Decision Processes*, *94*, 33-47.
- Smith-Ruig, T. (2009). Exploring career plateau as a multi-faceted phenomenon: Understanding the types of career plateaux experienced by accounting professionals. *British Journal of Management*, *20*, 610-622.

- Solinger, O. N., van Olffen, W., & Roe, R. A. (2008). Beyond the three-component model of organizational commitment. *Journal of Applied Psychology, 93*, 70-83.
- Sonnenberg, M., & Van Zijderveld, V. (2014). Talent management and differentiation: Addressing psychological-contract unreproducibility. *Academy of Management Proceedings, 2014*.
- Stout, S. K., Slocum Jr, J. W., & Cron, W. L. (1988). Dynamics of the career plateauing process. *Journal of Vocational Behavior, 32*, 74-91.
- Super, D. E. (1980). A life-span, life-space approach to career development. *Journal of Vocational Behavior, 16*, 282-298.
- Taneva, S. K., Arnold, J., & Nicolson, R. (2016). The Experience of Being an Older Worker in an Organization: A Qualitative Analysis. *Work, Aging and Retirement, 2*, 396-414.
- Tekleab, A. G., & Taylor, M. S. (2003). Aren't there two parties in an employment relationship? Antecedents and consequences of organization–employee agreement on contract obligations and violations. *Journal of Organizational Behavior, 24*, 585-608.
- Tett, R. P., & Meyer, J. P. (1993). Job satisfaction, organizational commitment, turnover intention, and turnover: Path analyses based on meta-analytic findings. *Personnel Psychology, 46*, 259-293.
- Thompson, K. W., Shea, T. H., Sikora, D. M., Perrewé, P. L., & Ferris, G. R. (2013). Rethinking underemployment and overqualification in organizations: The not so ugly truth. *Business Horizons, 56*, 113-121.
- Tims, M., Derks, D., & Bakker, A. B. (2016). Job crafting and its relationships with person–job fit and meaningfulness: A three-wave study. *Journal of Vocational Behavior, 92*, 44-53.
- Tremblay, M., & Roger, A. (1993). Individual, Familial, and Organizational Determinants of Career Plateau. *Group & Organization Management, 18*, 411-435.

- Tremblay, M., Roger, A., & Toulouse, J.-M. (1995). Career plateau and work attitudes: An empirical study of managers. *Human Relations, 48*, 221-237.
- Van Vianen, A. E. M., De Pater, I. E., & Preenen, P. T. Y. (2008). Career management: Taking control of the quality of work experiences. In J. A. Athanasou & R. Van Esbroeck (Eds.), *International Handbook of Career Guidance* (pp. 283-302): Springer.
- Veiga, J. F. (1981). Plateaued versus nonplateaued managers: Career patterns, attitudes, and path potential. *Academy of Management Journal, 24*, 566-578.
- Wang, Y.-H., Hu, C., Hurst, C. S., & Yang, C.-C. (2014). Antecedents and outcomes of career plateaus: The roles of mentoring others and proactive personality. *Journal of Vocational Behavior, 85*, 319-328.
- Wanous, J. P., Poland, T. D., Premack, S. L., & Davis, K. S. (1992). The effects of met expectations on newcomer attitudes and behaviors: A review and meta-analysis. *Journal of Applied Psychology, 77*, 288-297.
- Xie, B., Lu, X., & Zhou, W. (2015). Does double plateau always lead to turnover intention? Evidence from China with indigenous career plateau scale. *Journal of Career Development, 42*, 540-553.
- Zaremba, D. K. (1994). The managerial plateau: What helps in developing careers? *International Journal of Career Management, 6*, 5-11.
- Zeitz, G., Johannesson, R., & Ritchie, J. E. J. (1997). An Employee Survey Measuring Total Quality Management Practices and Culture: Development and Validation. *Group Organization Management, 22*, 414-444.
- Zhao, H., Wayne, S. J., Glibkowski, B. C., & Bravo, J. (2007). The impact of psychological contract breach on work-related outcomes: A meta-analysis. *Personnel Psychology, 60*, 647-680.

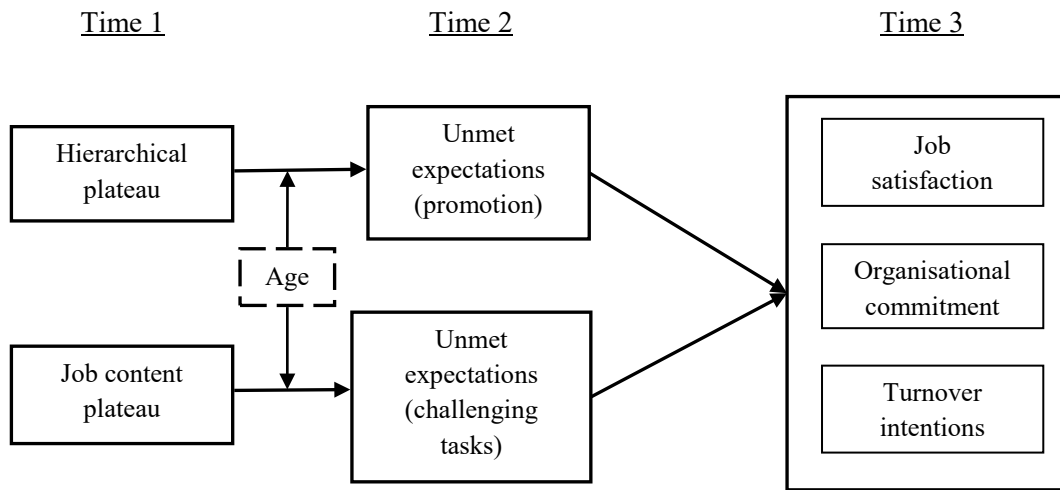


Figure 1. Hypothesised Research Model

Table 1*Means, Standard Deviations, Intercorrelations, and Coefficient Alphas*

Variables	<i>M</i>	<i>SD</i>	α	1	2	3	4	5	6	7	8	9	10
1. Age	34.31	10.25	—	—									
2. Job tenure (year)	2.46	2.84	—	.56**	—								
3. Gender	1.67	.47	—	-.10	-.02	—							
4. Hierarchical plateau T1 ^a	3.13	1.07	.93	.40**	.24*	-.08	—						
5. Job content plateau T1 ^a	2.54	.94	.89	.18	.17	-.02	.52**	—					
6. UE. – promotion T1 ^b	3.96	1.39	.88	.24*	.11	-.09	.44**	.65**	—				
7. UE. – challenge T1 ^b	3.77	1.30	.78	.05	.09	-.11	.32**	.78**	.56**	—			
8. Job satisfaction T1 ^b	5.16	1.51	.90	-.20	-.16	-.04	-.40**	-.61**	-.56**	-.51**	—		
9. Organisational commitment T1 ^b	4.27	1.52	.90	.04	.19	-.02	-.22*	-.28**	-.37**	-.30**	.41**	—	
10. Turnover intentions T1 ^a	2.60	1.26	.91	.17	.15	.01	.49**	.60**	.68**	.55**	-.77**	-.38**	—
11. Hierarchical plateau T2 ^a	3.31	.99	.89	.36**	.28**	.004	.73**	.35**	.25*	.26*	-.33**	-.17	.32**
12. Job content plateau T2 ^a	2.69	.94	.90	.18	.06	-.13	.36**	.65**	.49**	.57**	-.40**	-.35**	.38**
13. UE. – promotion T2 ^b	4.04	1.39	.89	.16	.05	-.13	.26*	.49**	.74**	.47**	-.46**	-.35**	.55**
14. UE. – challenge T2 ^b	4.10	1.33	.84	-.01	-.09	-.17	.18	.59**	.43**	.64**	-.26*	-.36**	.37**
15. Job satisfaction T2 ^b	5.04	1.56	.90	-.16	-.03	.07	-.31**	-.43**	-.49**	-.42**	.65**	.43**	-.55**
16. Organisational commitment T2 ^b	4.18	1.51	.84	-.06	.15	.04	-.22*	-.14	-.29**	-.15	.36**	.75**	-.28**
17. Turnover intentions T2 ^a	2.71	1.11	.85	.02	.01	-.16	.27*	.48**	.64**	.52**	-.59**	-.48**	.71**
18. Hierarchical plateau T3 ^a	3.41	.96	.93	.28**	.11	.04	.59**	.23*	.21	.14	-.29**	-.16	.26*
19. Job content plateau T3 ^a	2.54	.81	.85	.16	.08	.04	.27*	.49**	.29**	.37**	-.32**	-.28**	.21
20. UE. – promotion T3 ^b	3.92	1.24	.84	.21	.08	-.12	.14	.25*	.56**	.23*	-.30**	-.31**	.34**
21. UE. – challenge T3 ^b	3.86	1.22	.76	.03	-.02	-.09	.12	.48**	.29**	.54**	-.25*	-.16	.20
22. Job satisfaction T3 ^b	4.85	1.59	.90	-.14	-.03	.05	-.18	-.24*	-.27*	-.25*	.59**	.45**	-.43**
23. Organisational commitment T3 ^b	4.07	1.57	.90	.05	.24*	.04	-.12	-.01	-.20	-.09	.29**	.69**	-.19
24. Turnover intentions T3 ^a	2.82	1.15	.85	-.09	-.14	-.06	.04	.16	.36**	.19	-.40**	-.33**	.41**

Note. *N* = 87. For gender, 1 = male, 2 = female. UE = unmet expectations. T1 - T3 = Time 1 to Time 3. ^a = scales ranged from 1 (*strongly disagree*) to 5 (*strongly agree*), ^b = scales ranged from 1 (*strongly disagree*) to 7 (*strongly agree*). * *p* < .05; ** *p* < .01

Table 1 (Cont'd)*Means, Standard Deviations, Intercorrelations and Coefficient Alphas*

Variables	11	12	13	14	15	16	17	18	19	20	21	22	23	24
11. Hierarchical plateau T2 ^a	—													
12. Job content plateau T2 ^a	.37**	—												
13. UE. – promotion T2 ^b	.24*	.55**	—											
14. UE. – challenge T2 ^b	.22*	.78**	.53**	—										
15. Job satisfaction T2 ^b	-.31**	-.60**	-.58**	-.46**	—									
16. Organisational commitment T2 ^b	-.31**	-.34**	-.35**	-.23*	.49**	—								
17. Turnover intentions T2 ^a	.32**	.56**	.72**	.54**	-.73**	-.52**	—							
18. Hierarchical plateau T3 ^a	.69**	.28**	.21	.15	-.30**	-.20	.30**	—						
19. Job content plateau T3 ^a	.37**	.71**	.39**	.62**	-.43**	-.25*	.35**	.33**	—					
20. UE. – promotion T3 ^b	.13	.38**	.71**	.34**	-.34**	-.31**	.46**	.22*	.41**	—				
21. UE. – challenge T3 ^b	.45*	.56**	.34**	.65**	-.32**	-.11	.35**	.19	.74**	.30**	—			
22. Job satisfaction T3 ^b	-.31**	-.44**	-.43**	-.35**	.66**	.51**	-.57**	-.43**	-.51**	-.49**	-.32**	—		
23. Organisational commitment T3 ^b	-.19	-.26*	-.35**	-.15	.36**	.74**	-.47**	-.31**	-.19	-.37**	-.01	.59**	—	
24. Turnover intentions T3 ^a	.16	.30**	.45**	.29**	-.41**	-.31**	.66**	.35**	.39**	.54**	.27*	-.69**	-.49**	—

Note. $N = 87$. For gender, 1 = male, 2 = female. UE = unmet expectations. T1 - T3 = Time 1 to Time 3. ^a = scales ranged from 1 (*strongly disagree*) to 5 (*strongly agree*), ^b = scales ranged from 1 (*strongly disagree*) to 7 (*strongly agree*). * $p < .05$; ** $p < .01$

Table 2

Regression Analysis Predicting Job Attitudes of Career Plateau Individuals, with Unmet Expectation as Mediator

	Hierarchical plateau (Hypothesis 1 and 3)				Job content plateau (Hypothesis 2 and 4)			
	Unmet expectation promotion T2	Job satisfaction T3	Organisational commitment T3	Turnover intention T3	Unmet expectations challenge T2	Job satisfaction T3	Organisational commitment T3	Turnover intention T3
Control variables								
Gender	.15 (.10)	-.003 (.10)	-.003 (.10)	-.003 (.10)	-.15 (.08)	-.01 (.11)	-.02 (.11)	-.02 (.11)
Job tenure	-.01 (.11)	.01 (.10)	.28* (.12)	-.15 (.10)	-.19 (.09)	.05 (.11)	.22 (.11)	-.12 (.11)
Predictor variables								
Hierarchical plateau T1	.28* (.11)							
Direct effect		-.08 (.11)	-.10 (.11)	-.05 (.10)				
Main effect		-.19 (.11)	-.19 (.11)	.08 (.11)				
Job content plateau T1					.62** (.09)			
Direct effect						-.03 (.13)	.04 (.14)	.02 (.14)
Main effect						-.24* (.11)	-.05 (.11)	.18 (.11)
Mediator								
Unmet expectations - promotion T2		-.41** (.10)	-.34** (.10)	.47** (.10)				
Unmet expectations – challenging tasks T2						-.34* (.13)	-.15 (.14)	.26 (.14)
Indirect effect <i>ab</i>		-.11* (.05)	-.09* (.05)	.13* (.06)		-.21* (.09)	-.09 (.09)	.16* (.09)
<i>R</i> ²	.09	.19	.20	.23	.41	.13	.07	.10

Note. *N* = 87. For gender, male = 1, female = 2. Estimation of the standard errors are in parentheses. T1 - T3 = Time 1 to Time 3. * *p* < .05. ** *p* < .01.

Table 3

Regression Analysis Results of Moderating Effect of Age

	Unmet Expectation Promotion T2	Job Satisfaction T3	Organisational Commitment T3	Turnover Intentions T3	Unmet Expectation Challenge T2	Job Satisfaction T3	Organisational Commitment T3	Turnover Intentions T3
Control Variable								
Gender	.16 (.11)	-.003 (.10)	-.003 (.10)	-.003 (.10)	.16 (.11)	.008 (.11)	-.02 (.11)	.02(.11)
Job Tenure	-.06 (.13)	.01 (.10)	.28** (.10)	-.15 (.10)	-.19 (.11)	-.05 (.11)	.22* (.11)	-.12 (.11)
Predictor Variables								
Hierarchical Plateau T1	.25* (.12)	-.08 (.11)	-.10 (.11)	-.05 (.10)	.61** (.09)	-.03 (.13)	.04 (.14)	.02 (.14)
Job Content Plateau T1								
Mediator								
Unmet Expectations - Promotion T2		-.41** (.10)	-.34** (.10)	.47** (.10)				
Unmet Expectations - Challenging Tasks T2						-.34** (.13)	-.15 (.14)	.26 (.14)
Moderator								
Age	.10 (.14)				-.01 (.10)			
Hierarchical Plateau × Age	.05 (.11)							
Job Content Plateau × Age					.03 (.09)			
Index of Moderated Mediation		-.02 (.06)	-.02 (.05)	.03 (.07)		-.01 (.03)	.004 (.02)	.01 (.03)
<i>R</i> ²	.10	.19	.20	.23	.41	.13	.07	.10

Note. *N* = 87. For gender, male = 1, female = 2. Estimation of the standard errors are in parentheses. T1 - T3 = Time 1 to Time 3. * *p* < .05. ** *p* < .01. All variables have been centred to the mean.

Appendix 1

Unmet expectations of receiving promotion
I have not advanced as quickly in this organisation as I initially anticipated.
The position I now hold is below my initial expectation.
I am disappointed with my current job position.
I am disappointed with my current job title.
My career advancement in this organisation has been better than I originally anticipated. (R)
My career progression in this organisation has exceeded my expectations. (R)
Unmet expectations of receiving challenging tasks
My work content is more repetitive than I had originally expected.
My work is more routine than I initially thought it would be.
My work content is more difficult than I had originally anticipated. (R)
The variety of skills and talent needed in the job has lived up to the expectations I had. (R)
This job has been more challenging than I originally expected. (R)
<i>Note.</i> (R) denotes items that are reverse scored