

Who is attracted to an organisation using a forced distribution performance management system?

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Arguments related to forced distribution systems (FDS) are often dogmatic, but typically do not consider for whom such systems might be most and least appealing. We examine the relationships between participants' individual differences (cognitive ability, collectivism and core self-evaluations) and their attraction to an organisation utilising an FDS. From a sample of 143 advanced undergraduate students, we found that individuals were more likely to be attracted to an organisation using FDS when they possessed higher levels of cognitive ability and perceived FDS to be fairer. We also found a significant interaction between respondents' collectivism and fairness perceptions of FDS, indicating that individuals who are high in collectivism are particularly sensitive to perceptions of FDS fairness. Implications for organisational practice and future research are discussed.

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INTRODUCTION

A forced distribution system (FDS) is a type of performance management system in which an individual performance is evaluated relative to others' performance. Proponents of FDS suggest that an FDS can help build a high-performance, meritocratic culture by ensuring that managers better differentiate among high, average and low performers (Guralnik *et al.*, 2004). Some have extolled such practices as an efficient and pragmatic means of 'rewarding doers' and 'muscle-building' an organisation (Tichy and Sherman, 2001; Welch, 2001; Bossidy and Charan, 2002). Others condemn FDS as dysfunctional and suggest that such systems are hazardous to an organisation's health and culture (McBriarty, 1988; Pfeffer and Sutton, 2000; Pfeffer, 2001; Gladwell, 2002).

Despite passionate anecdotal discussions regarding either success or failure of such systems, empirical evidence has been slow to emerge (Pfeffer and Sutton, 2006). Recently, however, researchers have begun to explore the usefulness of FDS from multiple angles. For example, using a computer simulation, Scullen *et al.* (2005) demonstrated that FDS could lead to improvement in workforce potential with the improvement largely dependent on the percentage of voluntary turnover and low-performing workers that are fired. Schleicher *et al.* (2009) examined FDS from a rater's perspective and reported that raters found using FDS to be more difficult and less fair than a more traditional scale format. In addition, Schleicher *et al.* suggest that organisations implementing FDS should expect some resistance from managers. Other studies have examined FDS from the perspective of the *ratees*. In a study of research and development workers in South Korea, Kwak *et al.* (2009) compared the FDS ratings that employees expected to receive to those given by their supervisors. Kwak *et al.* found

that employees who received a rating that met their expectation reported the highest leader-member exchange and lowest turnover intention.

Another line of research is focusing on questions regarding attraction to organisations utilising FDS. Roch *et al.* (2007) found that participants rated FDS as being the least fair performance management system among several absolute and relative systems. Blume *et al.* (2009) presented a policy-capturing study reporting how four key FDS elements (*i.e.* the consequences for low performers, differentiation of rewards for top performers, frequency of feedback and comparison group size) influenced students' attraction to FDS. The authors found that respondents were most attracted to FDS with less stringent treatment of low performers, high differentiation of rewards, frequent feedback and large comparison groups.

In the present study, we extend the exploration of attraction to organisations utilising FDS. Examining perceptions of performance management systems such as FDS is important because employee perceptions of these systems are related to critical outcomes such as employee commitment and satisfaction (Mount, 1984; Wright, 2002; Levy and Williams, 2004). If a performance management system is not accepted and supported by employees, it is less likely to achieve its goals, and its effectiveness will ultimately be limited (Dipboye and de Pontbriand, 1981; Ilgen *et al.*, 1981; Cawley *et al.*, 1998; Kuvaas, 2011). Previous research has found that attraction varies considerably by the overall presence or weighting of various elements of FDS. Yet, interactional psychology suggests that such structural features of FDS are likely to interact with individual characteristics (*e.g.* personality, cognitive ability) in driving attraction to organisations utilising FDS. Thus, the purpose of the present study is to examine relationships between individual characteristics and attractiveness of organisations utilising FDS.

Person-environment fit

The framework of person-environment (PE) fit emerged from theories of PE interaction (Pervin, 1968; Kristof-Brown *et al.*, 2005). PE fit is defined as, 'the compatibility between an individual and a work environment that occurs when their characteristics are well matched' (Kristof-Brown *et al.*, 2005: 281). One key type of PE fit is person-organisation (PO) fit, and it represents a critical criterion for both employees and employers in the broad recruitment process (Breugh, 2008). More specifically, attraction to various aspects of organisational functioning has been extensively explored in the literature on PO fit (Kristof, 1996). This line of inquiry outlines conditions under which strong 'fit' is achieved by congruence between individual and organisational characteristics. Importantly, strong fit is known to be a critical component for attraction and retention of talent (Kristof-Brown *et al.*, 2005) as employees become attracted to and remain in environments that are well matched to their own dominant attitudes, skills and behaviours (Schneider, 1987). Chapman *et al.* (2005: 938) found that, 'perceptions of fit (*i.e.* subjective factors) proved to be one of the strongest predictors of the attitudinal applicant attraction outcomes'.

Attraction to organisations utilising FDS

HRM systems are among the most salient aspect of an organisation's environment (Wayne and Casper, 2012), and the performance management subsystem is of particular importance (Lawler, 1973; Bowen and Ostroff, 2004). Organisations can differentiate themselves on the bases of what is rewarded and how rewards are distributed (Gerhart and Milkovich, 1990), which is the key component of an organisation's performance management system. Bretz and Judge (1994: 533) noted that, 'Reward system characteristics reflect fundamental differences in what the organisation deems valuable, and how it chooses to distribute resources among its members'. They found support for their proposition that HR systems affects applicant job choices and that

some HR systems will be more important to some people than others. In addition, research in the recruitment literature has found that job seekers consider HR systems when they develop beliefs about an organisation's culture and consider whether they want to work for a company (Cable and Judge, 1996; Breaugh and Starke, 2000; Wayne and Casper, 2012). Scullen *et al.* (2005: 28) suggest that the performance management system may be a significant decision criterion or signal used by job seekers, remarking that:

'If job seekers become aware of a company's FDRS and consider it too stressful or risky, they might not apply. This could mean the loss of some high-potential applicants. It is certainly possible, however, that other high-quality applicants would see such a system as one where their contributions would be recognized and rewarded. These people might be eager to work in this type of environment'.

As Scullen *et al.* (2005) indicate, critical questions remain regarding who might be attracted to an organisation employing FDS. More specifically, their supposition implies that individuals may possess certain dispositional or attitudinal characteristics that are likely to play a partial role in influencing attraction to a particular organisation. Though several studies have explored issues of fit and the influence of fit on individuals' attraction to organisations (*e.g.* Judge and Cable, 1997; Chapman *et al.*, 2005), very little is known about the role in which individual differences play in influencing attraction perceptions of a given organisation's performance management system. Although numerous individual differences may be applicable in the study of FDS perceptions, we start with the notion that perceived fairness plays a central role (*cf.* Roch *et al.*, 2007; Blume *et al.*, 2009). In addition, we consider how certain salient individual differences likely moderate FDS fairness perceptions to influence attraction to organisations utilising FDS.

HYPOTHESES DEVELOPMENT

Perceptions of fairness

One critical aspect of attraction to any performance management system lies in the perceived fairness of the system (Jawahar, 2007). Indeed, Bretz *et al.* (1989) found that fairness perceptions of performance management procedures was the most important issue organisations faced in making such systems effective and accepted. Not surprisingly then, research has identified several important factors that may influence employee perceptions of an evaluation system's overall fairness, including participation in the process (Cawley *et al.*, 1998) and outcome satisfaction (Greenberg, 1987). More recent research has found that procedural and distributive justice are central to one's attraction to and satisfaction with performance evaluation (*e.g.* Jawahar, 2007; Thurston and McNall, 2010). This stream of research has generally supported the simple principle that fairness in procedures and distribution of outcomes enhance the acceptance of individual outcomes (Greenberg, 2004). Overall, meta-analytic work by Colquitt *et al.* (2001) showed that fairness perceptions had a population corrected correlation with negative reactions to and withdrawal from organisations of -0.38 and -0.34 , respectively. In other words, individuals who perceive organisational procedures and decision to be fairer overall are more likely to be committed to and remain with the organisation.

Given that performance management systems are at the heart of fair treatment perceptions, it stands to reason that perceptions of a performance management system's fairness are likely to be significantly related to one's attraction to an organisation implementing such a system. For example, Chapman *et al.* (2005) found that perceptions of fairness in the recruiting process influenced attraction to an organisation and job offer acceptance intentions. Put simply, when

employees believe an organisational system is fair, they are likely to prefer to work within such a system. We thus argue that individuals who perceive FDS to be fair will be more attracted to organisations that implement FDS.

Hypothesis 1: Perceptions of fairness of FDS will be positively related to the attractiveness of an organisation utilising an FDS.

Cognitive ability

General cognitive ability can be defined as the ability to reason correctly with concepts and solve problems, or more simply, as the ability to learn (Schmidt and Hunter, 2004). It is well known that cognitive ability is a strong predictor of job performance (Schmidt and Hunter, 1998). As Schmidt and Hunter (2004) suggest, one of the primary reasons for the robust relationship between cognitive ability and performance is that increased cognitive ability appears to be critical to the process of acquiring job knowledge. As such, over time individuals with high levels of cognitive ability are increasingly likely to experience success in school and on the job. Further, repeated success is likely to increase an individual's level of confidence about his or her ability to meet performance goals (Trank *et al.*, 2002).

Based on this supposition, we propose that highly intelligent individuals would have a natural attraction to organisations utilising FDS, as their successful performance experience provides them ample assurance that they would be able to outperform others and succeed in achieving performance in the highest differentiated FDS category (*e.g.* 90th percentile). Some empirical work supports this premise as Blume *et al.* (2009) found that individuals with higher cognitive ability favoured higher reward differentiation. Their findings suggest that the intelligence is associated with an attraction to a competitive performance management system like FDS that rewards high performers for exemplary performance. In addition, it has been suggested that high achievers often have strong tendencies towards competitiveness and comparative performance (Kanfer and Heggestad, 1997; Trank *et al.*, 2002). Thus, we propose that those with higher cognitive ability believe they will be a good fit in organisations that implement FDS.

Hypothesis 2: Cognitive ability will be positively related to the attractiveness of an organisation utilising an FDS.

Core self-evaluations

Core self-evaluations (CSE) represent the fundamental evaluations that people make about themselves and their functioning in their environment (Judge *et al.*, 2004). People with high CSE tend to have high self-esteem, self-efficacy, beliefs in personal control and emotional stability (Judge *et al.*, 1997). Individuals with positive CSE consistently appraise themselves in a positive manner across situations and see themselves as capable, worthy and in control of their lives (Judge *et al.*, 2004). Those who are more confident and feel in control of their future may be more assured that they can perform well in an FDS where they are compared with others. For example, someone who has high self-efficacy and a high internal locus of control will be confident that he can perform well and control events to positively influence the rating he will receive in an FDS. Therefore, individuals with higher CSE should perceive themselves as being a better fit within a competitive organisational environment where FDS is utilised.

In addition, research has shown that individuals with more positive CSE have tended to be better performers than those with more negative CSE (Erez and Judge, 2001; Judge and Bono, 2001). Individuals with high CSE may also be more likely to evaluate the individually oriented FDS environment in a positive way if they think the positive outcomes they expect to produce

will be better rewarded. This supposition is supported by previous research showing that individuals with high CSE engage in a high degree of goal-setting and sustain high levels of persistence in pursuing such goals (Judge *et al.*, 2005). Taken together then, this literature suggests that individuals with higher levels of CSE would be more attracted to FDS because of their expectation that they will be high performers and their desire to seek rewards consistent with such performance.

Hypothesis 3: CSE will be positively related to the attractiveness of an organisation utilising an FDS.

Collectivism

Collectivism refers to the extent to which an individual identifies with his or her collective or group (Erez and Earley, 1987). People with collectivistic values prefer to act as members of groups rather than individuals, emphasise 'we' rather than 'I' and prioritise the demands of the group over individual desires (Wagner and Moch, 1986; Wagner, 1995). Collectivists also tend to put more emphasis on harmonious relationships, sometimes at the expense of task accomplishment (Triandis, 1995; Chen *et al.*, 1998). Probst *et al.* (1999) found that in a post-task questionnaire completed after participating in a competitive situation, collectivists indicated that it was not important to them to earn more money than the other group members. Therefore, individuals who are more collectivistic may not be drawn to the highly competitive FDS environment that could negatively impact teamwork and potentially create a hostile environment where individuals would be competing against each other for rewards. This could cause more collectivistic individuals to perceive that they would not be a good fit in an organisation that implements FDS.

Hypothesis 4: Collectivism will be negatively related to attractiveness of an organisation utilising an FDS.

Interaction of fairness perceptions with CSE and collectivism

Although perceived fairness in FDS is likely to be positively associated with attraction to organisations utilising FDS, fairness perceptions are known to be influenced by contextual factors (*e.g.* outcome favourability) and various individual differences and perceptions (*e.g.* trust, organisational commitment) (Brockner *et al.*, 1997; Colquitt *et al.*, 2001). Most germane to the present study is the degree to which CSE and collectivism might augment or attenuate the perceptions of fairness based primarily on the perceived likelihood of outcome success or favourability.

Research has demonstrated that because individuals higher in CSE feel capable of succeeding and view themselves as more worthy and in control, they display greater effort and persistence towards achieving their goals and capitalise more effectively on their opportunities and resources (Judge *et al.*, 2005; Judge and Hurst, 2007). Therefore, we posit that those higher in CSE will have heightened confidence (*i.e.* self-esteem and general self-efficacy) and expect to obtain positive outcomes regardless of their perceptions of FDS fairness. In addition, individuals with higher CSE have been shown to have increased personal control and emotional stability, (Judge *et al.*, 1997), so they will likely believe they can positively influence the outcomes regardless of their perceptions of FDS fairness. That is, when individuals have more confidence that they will meet or exceed performance standards, the fairness of the performance management systems is less salient.

At the same time, fairness perceptions of FDS are likely to be more salient to individuals with lower levels of CSE. More specifically, individuals lower in CSE can be expected to have

less confidence in achieving positive outcomes within FDS when they perceive the FDS to be less fair. When expectations for positive outcomes within an FDS are low, concerns about the importance of fairness, particularly in process, are likely to be increased (Brockner *et al.*, 1997). Thus, we expect that the relationship between fairness perceptions and attraction to organisations using FDS will be stronger for those with lower CSE.

Hypothesis 5: CSE will moderate the relationship between perceived fairness of FDS and attractiveness of an organisation utilising an FDS, such that the relationship will be more positive for those with low CSE.

In addition, when considering how attracted individuals are to organisations utilising FDS, individuals high in collectivism are likely to be more sensitive to fairness perceptions of FDS. For example, Jackson *et al.* (2006) found support for the notion that for individuals with a collective self-concept (*i.e.* who define themselves in terms of their membership in larger groups), organisation-related information such as policies and procedures are highly salient and have a strong impact on attitudinal outcomes. In other words, individuals who are higher in collectivism would be more likely to consider how FDS may incorporate procedures that they would consider unfair, and thereby be less likely to be attracted to an organisation utilising FDS. In contrast, those lower in collectivism are less likely to be concerned about these issues or with the fairness of FDS (Jackson *et al.*, 2006). Therefore, we expect the relationship between fairness perceptions and attraction of an organisation utilising FDS to be stronger for individuals high in collectivism.

Indeed, highly collectivistic individuals desire a system that will encourage and promote teamwork so their cooperative behaviours will be valued (Earley, 1994; DeMatteo *et al.*, 1998). Those lower in collectivism may be more likely to believe that their individual contributions will be valued within a competitive FDS, even if the FDS is not perceived to be entirely fair. Collectivists are more likely to believe that the group's welfare is more important than individual rewards and that individuals should make sacrifices for the good of the group (Jackson *et al.*, 2006; Yoo *et al.*, 2011). Because collectivists frequently emphasise the goals of groups over individual goals, they would likely prefer performance management systems that more heavily reward this group-orientation. In other words, perceptions of fairness of the FDS are more critical for those high in collectivism because they are likely to be more concerned that an organisation using FDS could create an environment that would not adequately value the importance of their team contributions. For these reasons, those who are highly collectivistic would more likely be attracted to organisations utilising FDS when FDS is perceived as fair. We thus hypothesise:

Hypothesis 6: Collectivism will moderate the relationship between perceived fairness of FDS and attractiveness of an organisation utilising an FDS, such that the relationship will be more positive for those high in collectivism.

METHOD

Sample and procedures

Participants were 143 advanced undergraduate students enrolled in an organisational behaviour course at a large Midwestern University in the US. The sample was 57 per cent female and consisted primarily of traditional business students.

In order to better frame the discussion of FDS performance management systems for study participants, we created three distinct performance management system prototypes. The

prototypes (*i.e.* FDS, standard-based and group-based) represent a range of both individually oriented and group-oriented systems commonly used by organisations (Staw, 1986). Similar to Roch *et al.* (2007), we included both an absolute (*i.e.* standard-based) and relative system (*i.e.* FDS); both of which focused on rewarding individual performance. Based on Staw (1986), we also included a group-oriented system that distributes rewards based on group performance. Although many organisational systems are likely to be more complex and employ facets of various systems, these three prototypes help to anchor the discussion and are a useful starting point to capture important differences among performance management systems.

Each of the three types of performance management systems was characterised by a brief description of three companies (labelled as Company Type A through C) utilising the FDS, standard-based and group-based prototype systems, respectively (see Table 1). In addition, participants were asked to consider the comments of both proponents and detractors of the performance management systems prototype (see Table 1). All participants were also given the following instructions:

‘Assume that you are nearing the completion of your degree and are looking for a job. Also assume that the type of position, salary, location, etc. offered by each of the company-types described below is similar to one another and to other job offers you might expect to receive. Each of the company-types described below are similar to each other (*e.g.* same industry and size) and have allocated the same amount of money to distribute to their employees. However, each of them uses a different type of reward system to motivate employees and promote organizational performance. Typical rewards include pay increases, bonuses, stock options, and promotions. Please review each of these company-types below as well as the comments of both proponents (those for) and detractors (those against) of each company-type before answering the questions’.

All participants then answered questions regarding their perceptions of each of the three company types (*i.e.* perceived fairness of the performance management system and attractiveness of the organisation). In addition, they chose which of the three company prototypes they would choose to work for, which one they would find least attractive and provided a rationale for their choices. This was a form of manipulation check to help ensure that the participants reviewed each of the company types, compared them and explained their choice. The subjects also completed a short questionnaire that included the individual difference variables examined in the study.

Measures

Unless otherwise noted, all scale items were evaluated using a five-point Likert scale with anchors ranging from 1 (*strongly disagree*) to 5 (*strongly agree*).

Cognitive ability Cognitive ability was measured with the Wonderlic Personnel Test (Wonderlic Personnel Test Manual, 1983). This 12-minute, standardised intelligence test was completed near the beginning of the semester and prior to all other study measures. The Wonderlic is strongly correlated (range = 0.85–0.93) with the Wechsler Adult Intelligence Scale full scale (Dodrill, 1981; Dodrill and Warner, 1988) and has shown strong test-retest reliability (Dodrill, 1983) and construct validity (McKelvie, 1989). Normative data indicate that the mean score for the first-year college students is 24 out of 50; the mean for this sample was 25.

TABLE 1 Descriptions of performance management systems

Company type and description	Proponents' beliefs	Detractors' beliefs
<p>(A) Forced distribution system (FDS): This company type uses a comparative system in which employees are ranked against a peer group. Managers assign each employee to one of three categories, with 20% of employees receiving the 'high performance' ranking, 70% receiving the 'average performance' ranking and 10% receiving the 'low performance' ranking. Each employee receives one of these rankings every year. These rankings are used to distribute <i>much greater</i> rewards to the high performers than to the average performers. The 10% of employees receiving the low performance ranking are not given rewards. If these employees do not improve their performance, usually either they resign or their employment is terminated.</p>	<ul style="list-style-type: none"> • It is important to reward the doers. Clearly differentiating between higher and lower performers attracts and retains the higher performers. • 'Low performers' will be more satisfied working in another company where they can be more successful. Neither these 'low performers' nor the company will benefit from continuing the employment relationship. • This reward system stimulates a performance culture that does not tolerate mediocrity and lessens the drag on organisational performance from 'low performers'. 	<ul style="list-style-type: none"> • A comparative system creates internal competition that can destroy employees' teamwork and lead to a dysfunctional work environment where political games are more likely to be played. • Forcing managers to label some as 'low performers' could be arbitrary if everyone in the peer group is doing a good job. • Being labelled as a 'low performer' can be demoralising and counterproductive to improving individual performance.
<p>(B) Standards-based: This company type uses performance standards as a basis for determining employees' rewards. Those employees exceeding the performance standards receive rewards that are <i>slightly above</i> the average rewards given to those that meet the performance standards. Usually, about half the employees exceed standards while the other half meets the standards. The few employees who do not meet standards are given coaching to improve performance and their employment is rarely terminated.</p>	<ul style="list-style-type: none"> • Individual performance standards are a useful way to communicate expectations to employees and focus their attention and effort on these key factors. • Employees who meet the standards are rewarded accordingly while those who exceed the standards receive higher rewards so that individuals are rewarded based on their contributions. • Greater rewards can be given to employees who contribute more while it is less likely to encounter the potential negatives of a comparative system, such as large status and pay differences that can develop over time. 	<ul style="list-style-type: none"> • There are small differences in performance ratings and in the rewards given to individuals, which reduces individual motivation and promotes the status quo. • Employees may be too focused on their individual performance goals to the detriment of group and organisational goals. • In non-comparative systems, employee performance ratings tend to be inflated and distinctions between higher and lower performers is lost. This may reduce the incentive of employees to change or improve their performance.
<p>(C) Group-based: This company type bases rewards on organisational work unit performance. All employees that have the same job functions within the work unit receive similar rewards. Employees work with management to select work unit performance goals and if these goals are met, then everyone is rewarded. If the work unit misses or exceeds these performance goals, then all employees are rewarded according</p>	<ul style="list-style-type: none"> • It creates a cooperative rather than competitive culture that promotes teamwork. • Employees adopt a broad perspective to think of achievement in terms of the work units' mission and goals. • It avoids the difficult task of determining levels of performance at the individual employee level. Individual defensiveness is reduced and employees can more readily give and receive constructive feedback. 	<ul style="list-style-type: none"> • There is a weaker link between individual performance and rewards that can discourage outstanding individual performance and encourage social loafers (<i>i.e.</i> the system does not reward the doers). • Low individual performers can receive more rewards while high individual performers receive fewer rewards than their performance warrants. • Circumstances outside of the control of the employees in the work unit may negatively affect performance and influence whether goals are met.

CSE Judge *et al.*'s (2003) 12-item CSE scale (CSES) was used to measure an individual's CSE. In the present study, coefficient alpha was 0.80.

Collectivism Yoo *et al.* (2011) developed a six-item scale of collectivism that measures Hofstede's (1980) dimensions of culture at the individual (rather than country) level (*cf.* Yoo and Donthu, 2002). This measure is similar to what Jackson *et al.*'s (2006) term 'psychological collectivism'. A sample item reads 'Individuals should only pursue their goals after considering the welfare of the group'. Coefficient alpha was 0.76 for this sample.

Perceived fairness of the performance management system Fairness perceptions for each of the three performance management systems were measured by two items asking respondents if they thought that the company's performance management system was fair. The two items were, 'Employees are rewarded fairly in this company' and 'the reward system that this company uses is fair'. Coefficient alphas for the fairness perceptions of FDS, standards-based and group-based systems were 0.90, 0.91 and 0.88, respectively.

Attractiveness of organisation Attractiveness was measured with two items asking participants how attracted they would be to pursue employment with each company type. The items read 'I would like to work for this company' and 'I would be attracted to pursue employment with this company'.¹ Coefficient alphas for attractiveness of an organisation utilising FDS, standards-based and group-based systems were 0.90, 0.86 and 0.92, respectively.

RESULTS

Means, standard deviations (SDs) and correlations for variables included in the study are presented in Table 2. Prior to hypotheses testing, we conducted a confirmatory factor analysis (CFA) of all study variables. Overall, the CFA results indicated an acceptable fit to the data: $\chi^2(399) = 583.40$; root mean square error of approximation = 0.05; non-normed fit index = 0.91; comparative fit index = 0.92; and standardised root mean square residual = 0.07. Hypotheses were tested using regression analysis following the procedures outlined by Aiken and West (1991) for testing interaction effects. Overall, regression results indicated that we were able to explain 29 per cent of the variance in the attractiveness of an organisation utilising an FDS.

Hypothesis 1 conjectured that the perceptions of fairness of FDS would be positively associated with attraction to an organisation utilising FDS. As presented in Table 3, perceived fairness of FDS ($\beta = 0.46$, $p < 0.01$) had a significant, positive relationship with attraction to an organisation utilising FDS, thereby supporting Hypothesis 1. Exploring individual differences, Hypotheses 2–4 stated that cognitive ability and CSE would both be positively related to the attraction of organisations using FDS, while collectivism would be negatively related to attraction. Results indicate that cognitive ability had a positive association with attraction to organisations utilising FDS ($\beta = 0.18$, $p < 0.05$) whereas neither CSE nor collectivism had a significant relationship. These results indicate support for Hypothesis 2 but not for Hypotheses 3 and 4. Hypothesis 5 was not supported, as the interaction between perceived fairness of FDS and CSE was non-significant.

We found support for Hypothesis 6, which stated that collectivism would moderate the relationship between perceived fairness of FDS and attractiveness of an organisation utilising FDS. The interaction between perceived fairness of FDS and collectivism was significant ($\beta = 0.17$, $p < 0.05$). Given the significant finding for this interaction, we explored the form of the interaction, which is presented in Figure 1. As can be seen in the figure, the form of the

TABLE 2 Means, standard deviations, and correlations

Variable	M	SD	1	2	3	4	5	6	7	8	9
1. Attractiveness of organisation utilising FDS	3.09	1.12	(0.90)								
2. Perceived fairness of FDS	3.21	1.09	0.47**	(0.90)							
3. Attractiveness of organisation utilising standard-based	3.94	.77	-0.07	0.10	(0.86)						
4. Perceived fairness of standard-based	3.77	.87	0.05	-0.04	0.47**	(0.91)					
5. Attractiveness of organisation utilising group-based	3.21	1.01	-0.31**	-0.25**	-0.17*	-0.30**	(0.92)				
6. Perceived fairness of group-based	2.89	1.02	-0.28**	-0.23**	-0.14	-0.08	0.61**	(0.88)			
7. Cognitive ability	25.48	5.19	0.21*	0.05	0.15	0.13	-0.19*	-0.11	—		
8. Core self-evaluations	3.69	0.50	0.12	0.12	0.17*	0.19*	-0.07	-0.08	0.14	(0.80)	
9. Collectivism	3.45	0.58	0.03	0.16	0.24**	-0.05	0.17*	0.18*	-0.06	0.09	(0.76)

Note: Cronbach's coefficient alpha is listed in parentheses on the diagonal where applicable.

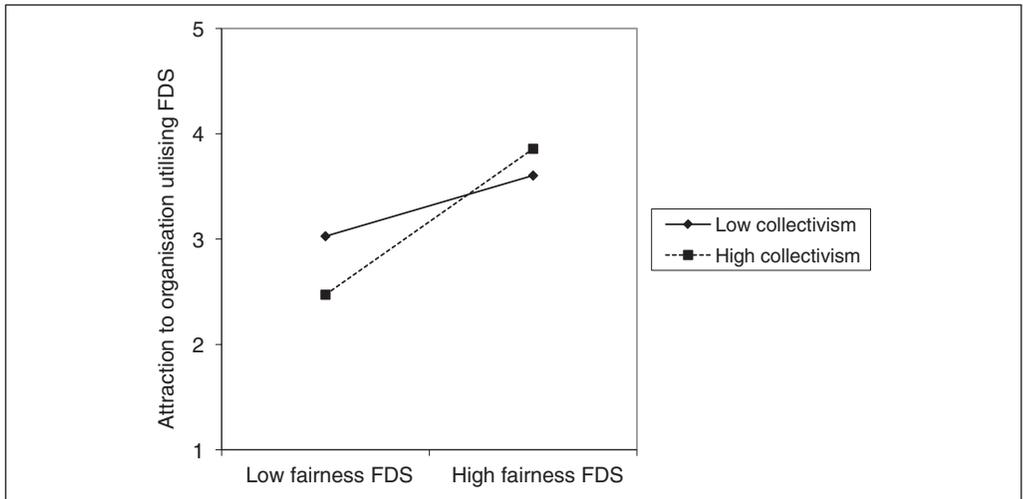
* $p < 0.05$, ** $p < 0.01$.

$n = 143$.

TABLE 3 Regression results for attractiveness of organisation utilising a forced distribution system (FDS)

Variables	β	t-value
Main effects		
Perceived fairness of FDS	0.46**	6.16
Cognitive ability	0.18*	2.50
Collectivism	-0.07	-0.93
Core self-evaluations	0.06	0.77
Two-way interactions		
Perceived fairness of FDS \times collectivism	0.17*	2.34
Perceived fairness of FDS \times core self-evaluations	-0.08	-1.10
R^2	0.29	
F-value	9.30**	
df	142	
* $p < 0.05$, ** $p < 0.01$. $n = 143$.		

Figure 1 Interactive effect of forced distribution system (FDS) fairness and collectivism on attractiveness to organisation utilising FDS



interaction supports the prediction in Hypothesis 6 that participants high in collectivism were less attracted to organisations utilising FDS when they perceived FDS to be less fair.

Post hoc analyses

Although our hypotheses were developed towards understanding attraction to organisations using FDS specifically, our method allows us to provide information post hoc that may

further serve to inform the science and practice of FDS and performance management. For instance, when asked to choose which of the three performance management prototype systems they most preferred, 21 per cent of the participants selected FDS, 59 per cent chose the standard-based, while 20 per cent selected the group-based system. The mean for perceived fairness of FDS was 3.21 (SD = 1.09), while the means for the perceived fairness of a standard-based system and a group-based system were 3.77 (SD = 0.87) and 2.89 (SD = 1.02), respectively. *T*-tests revealed that FDS was perceived as being significantly less fair than standard-based systems ($p < 0.01$), but more fair than group-based systems ($p < 0.05$). With regard to attractiveness to an organisation utilising FDS, the mean was 3.09 (SD = 1.12), while the means for the perceived attractiveness of an organisation utilising a standard-based system and group-based system were 3.94 (SD = 0.77) and 3.21 (SD = 1.01), respectively. When compared with organisations using FDS, *t*-tests indicated that participants were significantly more attracted to organisations using a standard-based system ($p < 0.01$) but did not significantly differ in attraction to organisations utilising a group-based system ($p > 0.05$).

Further, an examination of our results predicting attraction to organisations utilising FDS raises questions regarding the antecedents to standard-based and group-based systems. That is, we wondered whether cognitive ability, collectivism and CSE would have similar differentiating effects on attraction to systems other than FDS. As such, we conducted two *post hoc* regressions examining the influence of perceived fairness, cognitive ability, collectivism and CSE on the dependent variables of attraction to an organisation using standard-based and group-based systems. Results indicated that fairness perceptions ($p < 0.001$) positively predicted attraction to organisations utilising both a standards-based and group-based system. One additional significant relationship emerged from these analyses, namely, collectivism was found to positively predict attraction to an organisation using a standards-based system ($p < 0.05$). Thus, neither cognitive ability nor CSE were found to influence attraction to either standards or group-based systems.

DISCUSSION

What stands out most in our findings is that those high in cognitive ability were significantly more attracted to organisations utilising FDS than those with lower aptitude. Although the present results are generally consistent with prior literature discussions (e.g. Kanfer and Heggestad, 1997; Trank *et al.*, 2002) and managers' intuitive notions, this is the first empirical demonstration that individuals with high cognitive ability prefer an FDS. Those with high cognitive ability who expect to perform well may view FDS as an indicator that the company values high achievement and will be more likely to offer opportunities for promotion. Further, such individuals may also be more willing to work in a competitive environment where they believe they will rank highly when compared with others and be rewarded accordingly (Trank *et al.*, 2002). Our *post hoc* analyses bolster this perspective by suggesting that although individuals with high cognitive ability are significantly more attracted to organisations using FDS, these same individuals were no more or less likely to be attracted to group or standards-based systems. Taken together, these findings support a key reason that organisations often implement FDS, namely, to attract and retain high performers.

One underlying explanation of the present findings involves the concept of fairness. More specifically, the perception of fairness was the single strongest predictor of attraction to organisations utilising FDS. The *post hoc* analyses also indicated that perceptions of fairness were also significant predictors of attraction to organisations using standards- and group-based

systems. The interesting point, however, is that though participants were drawn to what they see as fair, they differ in their view of just what constitutes fairness in performance management. In addition, those high in collectivism were especially sensitive to their perceived fairness of FDS. It is likely that those high in collectivism were most concerned with how the FDS would influence teamwork and whether their effective team performance would be valued in an FDS that was not perceived as being fair.

One implication of these findings is that the managers faced with employing FDS systems in more collectivistic cultures would be well advised to highlight the benefits of the FDS for the group and organisation and to demonstrate how FDS is being fairly implemented. It could be that collectivistic individuals would be more likely to perceive that the FDS would create a highly competitive environment that could negatively impact teamwork and potentially create a hostile environment where individuals would be competing against each other for rewards. Robert Rogers, the president of consulting firm Development Dimensions International, suggests that, 'In organizations where cooperation and teamwork are highly valued, forced ranking can be a cultural poison' (Bates, 2003: 66). If this is the case, those high in collectivism could be more likely to perceive FDS to be unfair and to not be attracted to an organisation that utilises FDS.

On the one hand, over time, this could enable a culture to develop more quickly that supports FDS (Schneider, 1987). On the other hand, a company that is filled with employees who are low on collectivism could negatively affect that social environment and lead to less teamwork within an organisation. Therefore, companies that want to attract and retain highly collectivistic employees should make it clear to them how the FDS is fair. For example, studies by Blume *et al.* (2009) and Schleicher *et al.* (2009) suggest these companies should use large comparison groups and carefully communicate how they fairly deal with low performers under the FDS.

The present findings also inform the debate around the importance of performance management systems in assessing fit within the attraction and selection of new talent into an organisation (Kristof, 1996; Judge and Cable, 1997). This was demonstrated in our sample by the finding that relatively few respondents (21 per cent) prefer an FDS, while the majority of respondents were more attracted to a standard-based system. Given that Chapman *et al.* (2005) found that work environment and organisational image were the strongest predictors of job-organisational attraction, companies should recognise that a prominent FDS system is likely to influence applicant perceptions of the company more so than most other performance management systems. This is analogous to how pay for performance systems can create a sorting effect that identifies and attracts the most capable employees (*e.g.* Cadsby *et al.*, 2007). We believe that an FDS system is likely to exert a strong sorting effect, giving applicants the impression that the organisation is serious about rewarding high performers and does not tolerate poor performance (which other more traditional performance management systems are not likely to do).

Moreover, considerable prior research has shown that perceptions of justice influence a range of other important employee variables including retention and performance (Colquitt *et al.*, 2001). Thus, given that organisations are eager to attract those with the greatest likelihood of success, it is prudent to understand what different employee profiles consider fair and unfair. Managers in organisations that implement FDS should ultimately attempt to influence such fairness perceptions in ways that will attract the most productive workforce.

Most practically, our results suggest that the adoption of FDS is likely to accomplish at least some of what its staunchest proponents believe, namely, that FDS is a way to create an organisation that attracts and retains the highest performers (*i.e.* those with elevated cognitive

abilities). Yet, although it might be argued that higher cognitively able people would be preferable in all job contexts, research has shown that cognitive ability is most important for those job contexts which involve moderate to high levels of job complexity (Schmidt and Hunter, 2004). Thus, given that our results show close to 80 per cent of participants are more attracted to organisations utilising other systems and that FDS carry well-documented potential risks (e.g. erosion of teamwork, negative culture effects; Guralnik *et al.*, 2004), we argue that organisations would be best advised to reserve the use of FDS as a performance management system for those occupational roles of moderate to high job complexity. In short, FDS is likely to be most effective when managers deploy the system after careful consideration of both the nature of the workforce and job context.

At the same time, recent meta-theory suggests that when taken to the extreme, FDS interventions are likely to be counterproductive or result in being 'too much of a good thing' (Pierce and Aguinis, 2013), leading to diminishing returns in performance over time (Scullen *et al.*, 2005). For example, in FDS systems where underperformers are consistently replaced with more capable performers, logic suggests that eventually some good performers will find themselves in the underperforming category (e.g. 'C' player) because FDS requires the *a priori* distribution regardless of level of role performance. In turn, good performers may actually receive a feedback that suggests they are not performing well, leading to turnover or withholding of citizenship behaviour known to be associated with task performance (Podsakoff *et al.*, 2009; Mulligan and Bull Schaefer, 2011). Thus, consistent with the warnings of Pierce and Aguinis (2013), we caution organisations to carefully consider these issues before implementing FDS.

In interpreting these findings, three limitations of the study warrant mention. First, our measures of fairness perceptions and attraction included only two items. Although the reliability for these measures was high, future research should consider measuring these constructs with additional items.

Second, although college students nearing graduation are an important recruiting target for organisations and thus important for understanding issues of attraction, most students in our sample did not have substantial work experience or experience working within an FDS. Therefore, the generalisability of our findings may be limited to populations of new labour market entrants who have had limited experience working within multiple forms of performance management systems. In addition, inferences regarding the effect of individual differences on attractiveness of a given organisational performance systems are limited because we did not collect actual performance or other potentially influential performance-related variables (e.g. citizenship behaviour).

Third, the present study is limited to perceptual data, which warrants some caution in extending our results to managerial practice. Although this study contributes to the understanding of perceptions that may influence attraction, it is critical that such perceptions are ultimately linked to behavioural and performance outcomes of individuals across various systems. For example, the prudent manager would likely want to see actual data across both contextual and performance domains that might be attributable to FDS.

One interesting question for future research would be whether it is possible to increase attraction of those with high cognitive ability to organisations utilising standard-based systems if other exceptional benefits or good developmental job opportunities were offered in tandem. In addition, it would be useful to describe other information about the job, such as base salary, in order to examine the *relative influence* of the performance management system as compared with other factors driving attractiveness. With our *post hoc* findings in mind, it seems clear that individuals' perceptions of system fairness matters, regardless of the system being

implemented. As such, future research may seek to understand at a more molecular level whether similar types of system features are driving this effect.

In addition, we think it would be useful to examine how FDS influences *job classes* rather than the organisation as a whole (Dreher and Dougherty, 2001; Wright *et al.*, 2001). That is, we suspect that FDS might be highly effective in some organisational units, and with some collections of people (*e.g.* salespeople), and yet dysfunctional in other units even within the same organisation. Future research in these areas would be useful to developing a contingency perspective related to the implementation of FDS.

A final direction for future research could examine the influence of other individual difference variables on fairness perceptions and attraction to organisations utilising FDS.² Certain virtues (*e.g.* wisdom and knowledge, courage) and character strengths (*e.g.* curiosity, authenticity) (Cameron *et al.*, 2003; Peterson and Seligman, 2004; Seligman *et al.*, 2005) could have an impact on perceptions of FDS. The Big Five personality variables could also influence perceptions of FDS. For example, more extraverted individuals might be more attracted to FDS if they believe their assertiveness and interpersonal interactions will enable them to make good first impressions and positively influence others' perceptions.

A consistent finding of management research is that the effectiveness of most any intervention is contingent on the people and context of that intervention. Arguments surrounding FDS have been painted in unfortunately broad brush strokes that are not sufficiently cognisant of the important differences in people and places that might influence the relative effectiveness of such systems. The present study is among the first to consider important individual differences that may influence FDS outcomes and the findings suggest that this is likely a fruitful line of research.

Notes

1. Given that the performance management system information was the only information about the company available to participants, it is reasonable to assume that a participant's stated level of attraction to the organisation is based solely on the information presented related to the performance management system.
2. We thank two anonymous reviewers for the suggestions discussed in this paragraph.

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