The main purpose of this paper was to analyse the predictive role of personality, self-efficacy, and impression management on contextual performance in academic settings. A sample of 223 university students voluntarily answered a battery of tests on-line. Results showed that conscientiousness, extraversion, and agreeableness, as well as self-efficacy, predict contextual performance self-evaluations. Furthermore, the significant interaction between conscientiousness and self-efficacy multiplies their influence. Besides, impression management contributes to predicting contextual performance, but did not interact with the remaining variables. Results related to personality and self-efficacy are consistent with those found in work settings.

This paper explores the role of personality, self-efficacy, and impression management as predictors of contextual performance in an academic setting. It also analyses whether self-efficacy and impression management mediate the relationship between personality and contextual performance.

The influence of personality on job performance has received considerable attention by researchers. Since the development of the Five-Factor Model (FFM; Costa & McCrae, 1985, 1992), personality has been more clearly shown as a valid predictor of both job performance (Barrick & Mount, 1991; Barrick, Mount, & Judge, 2001; Judge, Jackson, Shaw, Scott, & Rich, 2007; Salgado, 1997) and academic performance (Chamorro-Premuzic & Furnham, 2003; Conard, 2006; Komarrajju, Karau, Schmeck, & Avdic, 2011; O’Connor & Paunonen, 2007; Poropat, 2009).

In a meta-analysis, Hurtz and Donovan (2000) found that estimated true validities ($p_v$) for explicit measures of the Big Five ranged from .06 to .20, and the estimated true-score correlations ($p_r$) ranged from .07 to .22. Consistent with meta-analyses carried out by Barrick and Mount (1991) and Salgado (1997), the highest validity of the Big Five dimensions was for Conscientiousness ($p_v = .20$), whereas Emotional Stability had a substantially lower estimated true validity ($p_v = .13$). The remaining personality factors are relevant only for some criteria and for some occupational groups (Barrick et al., 2001; Hurtz & Donovan, 2000; Salgado, 1997).
Personality and Contextual Performance

Personality may have different effects depending on the task (or contextual) performance kind under study (Van Scott & Motowidlo, 1996). The distinction between these two types of performance and their background was suggested in Borman and Motowidlo's (1993, 1997) two-factor theory. Task performance refers to those job-prescribed behaviours that support the organisation's technical core (Borman & Motowidlo, 1997; Viswesvaran & Ones, 2000). Contextual performance comprises discretionary behaviours, such as the voluntariness to undertake tasks and to assist and cooperate with colleagues. These tasks are not generally considered part of the formal role and not directly or explicitly recognised by compensation systems. Nevertheless, they contribute to maintaining the social system, by facilitating the achievement of organisational goals (Borman & Motowidlo, 1997; Organ & Ryan, 1995; Whitman, Van Rooy, & Viswesvaran, 2010).

Motowidlo, Borman, and Schmit (1997), suggested three main differences between task and contextual performance. The most relevant to our study is that the main antecedents of contextual performance are personality traits, while those of task performance are abilities and skills. However, the meta-analysis carried out by Chiaburu, Oh, Berry, Li, and Gardner (2011) shows that personality influences both types of performance, but through different traits. Conscientiousness ($\rho = .22$), Openness to experience ($\rho = .17$), and Agreeableness ($\rho = .17$) influence contextual performance, while Conscientiousness ($\rho = .16$) and Emotional Stability ($\rho = .14$) influence task performance.

Several meta-analyses show that Conscientiousness and Agreeableness are the main predictors of contextual performance (Hurtz & Donovan, 2000; Organ & Ryan, 1995). More recent studies show that Emotional Stability (Small & Diefendorff, 2006) and Openness to Experience play an important role too (Chiaburu et al., 2011).

Academic contextual performance has received little attention, despite there is evidence to suggest its importance (Poropat, 2011; Schmitt et al., 2007). Several citizenship behaviours could be important in academic groups, especially when group productivity must be achieved. Helping and cooperating with others, persisting with enthusiasm and extra effort, interpersonal facilitation, and altruism are good examples (Borman & Motowidlo, 1993, 1997; Hogan, Rybicki, Motowidlo, & Borman, 1998; Smith, Organ, & Near, 1983).

The importance of personality as predictor of contextual performance, together with the lack of studies on this topic in academic settings, addresses the first hypothesis:

**H1**: Conscientiousness and Agreeableness will contribute more than other personality factors to explaining contextual performance in an academic setting.

Personality, Self-Efficacy, and Contextual Performance

In addition to identifying which traits influence task and contextual performance, it is necessary to explore whether several proximal predictors moderate this relationship (Barrick et al., 2001). Some moderating variables analysed include cognitive skills and job structuring (e.g., Shaffer & Postlethwaite, 2013) or satisfaction (Ilies, Fulmer, Spitzmuller, & Johnson, 2009). Barrick et al. (2001) stressed the importance of analysing the role of motivation-related variables as mediators in the relationship between personality and performance. Self-management (Gerhardt, Rode, & Peterson, 2007), goal setting (Klein & Lee, 2006), and self-efficacy (Judge et al., 2007; Oren, Tziner, Nahson, & Sharoni, 2013; Tabak, Nguyen, Basuray, & Darrow, 2009) have also been suggested as mediators. Particularly, this research focused on analysing the role of self-efficacy in the relationship between personality and contextual performance. The reasons for this decision are, firstly, that the concept of self-efficacy covers the propensity to self-management and goal setting, among other aspects (Tabak et al., 2009) and, secondly, Dovidio, Piliavin, Gaertner, Schroeder, and Clark (1991, cited in Todd & Kent, 2006, p. 255) and Midlarsky (1984, cited in Todd & Kent, 2006, p. 255) have suggested that people who consider themselves competent in their tasks will tend to assist and cooperate with colleagues to a greater extent, which is one of the central dimensions of contextual performance.

Self-efficacy is defined as a set of beliefs about one's own capacity to efficiently manage a situation or specific task (Bandura, 1997). Self-efficacy significantly contributes to the level of motivation (Bandura & Locke, 2003), which might foster citizenship-like behaviours. Several studies analysed its mediating role in the relationship between personality and task performance (Judge & Ilies, 2002; Judge et al., 2007), but just a few analysed its relationship with contextual performance (Oren et al., 2013), yielding contradictory results. Some studies found positive relationships between self-efficacy and contextual performance (Bolino & Somech, 2004; Chen & Kao, 2011; Hawley & Levy, 2001). Nevertheless, Oren et al. (2003), did not find this connection, perhaps because they used a general rather than a specific measure of self-efficacy.

The second objective of this research is to test the predictive role of self-efficacy upon contextual performance, as well as to analyse whether self-efficacy mediates the influence of personality dimensions on contextual performance.

**H2**: Self-efficacy will significantly explain variance of contextual performance self-appraisals.

**H3**: Self-efficacy will interact with personality in explaining contextual performance self-appraisals.

Impression Management and Contextual Performance

Social desirability is defined as the tendency to give positive self-descriptions (Paulhus, 2002), the conscious or unconscious distortion of personal attributes (Ingold, Kleinmann, König, & Melchers, 2014). Paulhus (2002) distinguishes two components of social desirability: impression management and self-deception. The former raises a conscious tendency to distort self-descriptions because of social or regulatory pressure, instead of issuing a truthful self-report, whereas the latter refers to an unconscious tendency to report inflated self-descriptions of which they are honestly convinced. This phenomenon has been addressed in psychology because of the potential negative effects on the validity of personality measures (e.g., Barrick & Mount, 1991; Bolino, Kacmar, Turnley, & Gilstrap, 2008; Costa & McCrae, 1988; Viswesvaran, Ones, & Hough, 2001). Several research projects focused on the understanding of the various ways in which Impression Management affects performance self-appraisals. Ones, Viswesvaran, and Reiss' (1996) meta-analysis demonstrated that social desirability bears no relationship with job performance ($r = .10$). Three hypotheses have been raised to explain these results. First, that individual differences in Impression Management are performance predictors only for certain jobs (Rosse, Stecher, Miller, & Levin, 1998). The second hypothesis considers whether these results are due to the fact that both dimensions of social desirability have been examined jointly. The third hypothesis raises the possibility that Impression Management is associated with specific dimensions of job performance (Hogan & Roberts, 1996; Schneider, Hough, & Dunnette, 1996).
In order to contrast these hypotheses, Viswesvaran et al. (2001) carried out a meta-analysis and two primary studies. Their results reject the idea that Impression Management has a higher predictive validity than overall measures of social desirability. Moreover, neither Impression Management nor social desirability explain overall job performance variance. These authors consider the need to find variables that moderate the relationship between Impression Management and job performance. They also point out that the predictive validity of Impression Management may be lower for individuals with low ratings in self-monitoring, a construct considered similar to self-efficacy by Snyder (1979). In their meta-analysis, Ones et al. (1996) did not find that social desirability predicted academic performance, task, and job performance, or counterproductive behaviours.

Other studies have analysed the influence of Impression Management on contextual performance appraisals (Ingold et al., 2014; Yun, Takeuchi, & Liu, 2007). One of their conclusions suggests that Impression Management can be an important source of motivation for contextual behaviours at work. Bolino (1999) suggests that the impact of personality on citizenship behaviours will be weaker when Impression Management motives are stronger. These studies consider the need to continue exploring the complex relationship between contextual performance and Impression Management and to discover which factors influence the functioning of this relationship.

The third objective of this research is to analyse whether Impression Management has predictive power over contextual performance in academic contexts, and to explore whether the influence of personality dimensions and self-efficacy in contextual performance is mediated by Impression Management.

H4: Impression Management will significantly predict contextual performance self-appraisals.

In summary, the overall aim of this study is to analyse the extent to which personality explains self-appraisal of contextual performance in an academic setting. A second aim is to test whether self-efficacy predicts contextual performance, and a third aim is to test whether self-efficacy moderates the influence of personality on contextual performance. Finally, the study tests the effect of Impression Management on personality and on contextual performance.

Method

Participants

The sample was composed of 223 second-year university students of psychology (72%) or third-year labour relationships (28%); women were 78.7% of the sample and all of them were Spanish. Participants followed a previous six-month training activity. This activity required to work in small groups (3-6 persons), which was the setting in which participants self-appraised their contextual performance. The group task carried out by the students of psychology consisted of the development and interpretation of a sociometric test. They were required to prepare a questionnaire that included instructions, personal and sociodemographic data, and four questions of acceptance or rejection between components of the group to be evaluated. The questionnaire was applied to a group chosen by the students. The data obtained were entered in Excel and analysed by the R statistical program. Finally, the students were required to interpret the results and graphs, make an oral presentation and write a report that included intervention proposals. The task of the students of labour relationships was to perform an organisational diagnosis. A standardised questionnaire was applied to members of an organisation chosen by the students. The results obtained were interpreted for diagnosis and an intervention proposal. Finally, the group made an oral presentation and a report.

Instruments

Four instruments were used to measure the variables considered in this study:

The NEO-FFI Personality Inventory (Costa & McCrae, 1992). This questionnaire includes 60 items that offer a quick general measure of the Big Five personality factors: Conscientiousness, Emotional Stability, Extraversion, Openness to Experience, and Agreeableness. Each factor is assessed using 12 items that describe a person’s habitual behaviour. Each item had a five-point scale, ranging from totally disagree to totally agree. The internal consistency of dimensions ranged between .86 and .92 in the original study by Costa and McCrae (1992). With this sample, Cronbach's alphas for each dimension varied between .68 and .87 ($\lambda_6 = .72$–.89, $\Omega_T = .81$–.92, $\Omega_H = .60$–.77).

Self-efficacy scale for performing group work. This scale comprised five items adapted from Baessler and Schwarzer's (1996) General Self-Efficacy Scale. Participants were required to assess the degree of confidence they had in being able to overcome group work situations. For example, “To solve difficult problems when working in a group if I try hard enough”, or “To calmly face work even in difficult situations.” The response scale ranged from 0 = no confidence to 10 = total confidence. Reliabilities of the Spanish version ranged between $\alpha = .85$ and $\alpha = .87$ (Padilla, Acosta, Guevara, Gómez, & González, 2006; Sanjuán, Pérez, & Bermúdez, 2000). For this sample, Cronbach's alpha was $\alpha = .83$ ($\lambda_6 = .80$, $\Omega_T = .87$, $\Omega_H = .63$).

The Impression Management scale. This was a reduced version of the Impression Management scale from the Balanced Inventory of Desirable Responding (BIDR; Paulhus, 1984, 2002). This version included 14 items, scored on a seven-point scale, ranging from 1 = totally disagree to 7 = totally agree. Some examples of items of this scale are “I sometimes tell lies if I have to” or “I have done things that I don’t tell other people about”. The original scale had Cronbach alphas ranging from $\alpha = .68$ to $\alpha = .80$. For this sample, $\alpha = .93$ ($\lambda_6 = .93$, $\Omega_T = .95$, $\Omega_H = .85$).

The Contextual Performance Scale (OCB). This tool is an adaptation into Spanish of Coleman and Borman’s (2000) scale (Díaz Vilela, Díaz Cabrera, Isla Díaz, Hernández Fernaud, & Rosales Sánchez, 2012), with some changes to adapt it to an academic setting. The questionnaire was used to measure citizenship performance as a global construct. Participants were required to assess the extent to which the behaviours portrayed were characteristic of themselves. The response scale was a six-point scale, with two extreme anchorages, it is not at all characteristic and it is characteristic. The scale was composed of 26 items about generalised compliance and altruism. Some examples of items are “Showing enthusiasm when carrying out group work”, “Endorsing, supporting or defending the training objectives of the course”, “Helping other classmates”, and “Participating responsibly in meetings and group activities”. The overall reliability of the scale reached a Cronbach's $\alpha = .89$ ($\lambda_6 = .92$, $\Omega_T = .92$, $\Omega_H = .79$).

Procedure

Participants were asked to answer to the questionnaires by using a computer application. They entered the application with username and password and completed the questionnaires in whichever order they chose. The computer application made it possible to answer in
different sessions. Once the questionnaire was completed, it could not be modified. The application was available for 30 days and overall completion took around 45 minutes.

Participation in this study was voluntary and consented. Although the answers were not anonymous, participants were informed that all data were confidential and would be handled solely for research purposes.

**Statistical Analyses**

Normality of distributions was tested with Kolmogorov-Smirnov normality test. Univariate outliers were analysed through standardised scores ($z > 3.00$), while multivariate outliers were analysed through Mahalanobis Distance ($p < .001$). In order to test Hypotheses 1 to 4, we carried out four multiple linear regression analyses, following the stepwise method.

**Results**

Kolmogorov-Smirnov normality test only was significant for Impression Management, $F(221) = .08$. Considering the small size of the statistic and the sample size, normality is assumed (Tabachnick & Fidell, 1989). Neither univariate nor multivariate outliers were found.

**Descriptive Statistics**

Table 1 shows the means and standard deviations of each variable under study, as well as the correlations between them. The data showed an interesting pattern of correlations. Specifically, Contextual Performance showed higher correlations with Conscientiousness ($r = .324, p < .01$), Agreeableness ($r = .334, p < .01$), Extraversion ($r = .249, p < .01$), and also with Impression Management ($r = .365, p < .01$). Moreover, Self-Efficacy displayed higher correlations with Emotional Stability ($r = .378, p < .01$), Openness to Experience ($r = .279, p < .01$), and Conscientiousness ($r = .277, p < .01$). Also, the correlation between Agreeableness and Impression Management is remarkable ($r = .553, p < .01$).

**Predictors of Contextual Performance**

In order to test Hypothesis 1, we carried out a multiple linear regression analysis, following the stepwise method. The five personality dimensions entered as predictor variables, while the criterion variable was the overall measurement of Contextual Performance. The resulting model, Regression Model 1 in Table 2, reached an $R^2 = .18$. Conscientiousness, Extraversion, and Agreeableness appear as significant predictors of Contextual Performance. Agreeableness is the dimension with the highest predictive power upon Contextual Performance ($\beta = .23, T = 3.549, p < .001$). This result supports our first hypothesis, but Extraversion also appears to be a predictor.

In order to verify Hypotheses 2 and 3, Self-Efficacy was entered in the regression model. This Regression Model 2 includes Self-Efficacy as well as the three dimensions of the previous model, increasing the percentage of the variance explained ($R^2 = .22$). The ANOVA performed to compare the two models showed that the increase in $R^2$ was significant, $F(4, 220) = 4.021, p < .01$. Moreover, an interaction effect was found between Conscientiousness and Self-Efficacy, and Impression Management as a new predictor. The resulting model (Regression Model 3) reached an $R^2 = .24$. The ANOVA comparing previous model revealed that the increase was statistically significant, $F(4, 216) = 4.74, p < .01$. In other words, as Conscientiousness increases, the relationship between Self-Efficacy and Contextual Performance grows.

In order to analyse the possible predictive role of Impression Management in Contextual Performance (Hypothesis 4), we carried out another multiple linear regression analysis. In this case, we introduced the significant variables in Regression Model 2, the interaction of Conscientiousness and Self-Efficacy, and Impression Management as a new predictor. The resulting model (Regression Model 3) reached an $R^2 = .24$. The ANOVA comparing previous and current model revealed that the increase was statistically significant, $F(4, 216) = 4.74, p < .01$: Impression Management increases the predictive capacity of the model.

Finally, we also analysed the possible interactions between the remaining variables and Impression Management in a new regression analysis. The resulting model explained 24% of the variance of Contextual Performance, there was no significant increase in goodness of fit ($p = .60$): none of the interactions...
increases the predictive capacity of the model. Therefore, the introduction of Impression Management does not modify the pattern of relationships found between the Personality, Self-Efficacy, and Contextual Performance.

Discussion

The general aim of this study was to analyse the predictive capacity of personality dimensions, self-efficacy, and Impression Management on self-reported contextual performance in an academic setting. A series of important conclusions are drawn from the results.

First, Agreeableness, Conscientiousness, and Extraversion are closely related to contextual performance in the academic sphere. These results support the first hypothesis and are consistent with those found in working contexts (Hurtz & Donovan, 2000; Organ & Ryan, 1995), where Conscientiousness and Agreeableness emerge as the main predictors of contextual performance. Current results show that Extraversion also explains variance of contextual performance. One reason for this result can be that Extraversion is closely associated with some specific contextual performance dimensions, especially with interpersonal facilitation and social interaction (LePine & Van Dyne, 2001; Van Scotter & Motowidlo, 1996). Another explanation has to do with the academic setting, which often involves group tasks demanding social interaction. Future research should explore these issues by analysing the relationship between personality dimensions and the different dimensions of contextual performance.

Secondly, Self-Efficacy maintains a direct relationship with contextual performance, but also interacts significantly with Conscientiousness. In accordance with previous research in work settings (Bogler & Somech, 2004; Chen & Kao, 2011) and academic settings (Haworth & Levy, 2001), our results show that the higher the levels of self-efficacy, the higher the contextual performance self-ratings. This result supports the second hypothesis, and shows that the strength of the relationship between Conscientiousness and contextual performance increases with self-efficacy. This result partially confirms the third hypothesis and points out the importance of studying the interactions of personality dimensions with other variables to gain accuracy in predicting contextual performance.

Thirdly, Impression Management significantly contributes to explaining the variance of contextual performance self-ratings, as was considered in the fourth hypothesis. Nevertheless, this variable does not interact with any other predictors in the model. Therefore, Impression Management does not mediate the relationship of Conscientiousness, Extraversion, and Agreeableness with contextual performance, or the relationship between Self-Efficacy and contextual performance. This result suggests that individuals with a greater tendency to manage their image present higher levels of contextual performance (Ones et al., 1996; Salgado, Iglesias, & Remeseiro, 1996, cited in Salgado, 2005). Following Bolino (1999) and Yun et al. (2007), an explanation for this result can be that students motivated to alter their image are more prone to exert behaviours characteristic of contextual performance.

One of the main contributions of this work is that it provides information about predictors of contextual performance in academic settings. To date, there has been little research on this issue. The academic sphere, particularly in a university context, shares some characteristics with the work setting. Team work is needed for good results, coordination between colleagues is overriding, and students have high levels of interdependence. However, more research is needed to analyse whether personality factors, self-efficacy, or Impression Management are related to contextual performance in academic settings in a similar way to how they are in work settings. Future research should rely on both, self-reports and data provided by fellow students and/or lecturers about contextual performance. This will enable us to test whether both measures share the same predictors and whether these predictors have similar weights in both cases. Besides, further research should address the relationship between predictor variables and different dimensions of contextual performance.

From an applied perspective, our results could be useful in academic settings, particularly in relation to the formation of working groups, given that certain personality characteristics of group members could influence their contextual performance. These results also stress the importance of promoting self-efficacy among students related to group tasks.

Conflict of Interest

The authors of this article declare no conflict of interest.

References
