**Conscientiousness and Job Performance**

**Conscientiousness and Overall Job Performance**

Starting from the early 1990s, the use of meta-analytic method has greatly improved research in the area of the relationship between the Big Five personality dimensions and job performance. According to the results of these studies, among the Big Five personality dimensions, conscientiousness has emerged to be one of the best and most consistent predictors of job performance (Anderson and Viswesvaran, 1998; Barrick & Mount, 1991; Salgado, 1997). This perception is pretty intuitive, in that people who are more conscientiousness tend to be more hard-working, responsible, and self-disciplined, all of which are imaginable beneficial to almost all types of work. It’s just really hard to name a job that won’t benefit from these tendencies and qualities. For example, Barrick and Mount (1991) conducted a meta-analysis investigating the relationship between the Big Five and job performance, and found that conscientiousness was the most consistent predictor of three job performance (job proficiency, training proficiency, and personnel data) across five different types of occupations (professionals, police, managers, sales, and skilled/semi-skilled). The correlations between conscientiousness and job performance range from 0.20 to 0.23. These findings were later supported by Salgado (1997), using a European community sample. Salgado found an overall validity coefficient of .25 for conscientiousness, which was the highest among the Big Five. In terms of personality-occupation combinations, he found that conscientiousness showed validity across occupations (police, professionals, managers, sales, and skilled labor), and the coefficient ranged from .10 to .24, which was also consistent with Barrick and Mount (1991). Although Tett, Jackson, and Rothstein (1991) concluded that conscientiousness had a non-significant corrected correlation with job performance (*ρ* = .179), conscientiousness, along with the other four members of the FFM sure attracted the attention of psychologists.

In 2000, Hurtz and Donovan revisited the relationship between the Big Five personality dimensions and job performance, and pointed out that previous meta-analyses (Barrick & Mount, 1991; Tett et al., 1991; Salgado, 1997) were flawed in construct validity, in that a large amount of the measures used in these studies were not designed to explicitly measure the Big Five personality dimensions. The authors overcame the deficiencies by including only the scales that were explicitly designed to measure the Big Five, and they concluded that the true validity of conscientiousness was 0.2 across occupations and performance criterial, which the authors deemed to be to small to suggest that conscientiousness should have the same status as that of general cognitive ability for personnel selection purposes, especially considering the correlation between conscientiousness and conventional selection techniques such as interviews and reference checks, about which interested readers can find more information in Behling (1998).

Disagreeing with findings of Hurtz and Donovan (2000) that the effect of conscientiousness was trivial on job performance and thus shouldn’t be considered a valuable predictor of job performance, at the beginning of the millennium, in order to overcome the deficiency of having a small number of studies in some of the previous meta-analyses (e.g., Tett et al., 1991), Barrick, Mount, and Judge (2001) published a study where they quantitatively summarized 15 prior meta-analyses that studied the relationship between the Five Factor Model (FFM) and job performance. What they found was that conscientiousness was a valid predictor across performance measures and occupational types. To be more specific, conscientiousness was found to consistently have the highest validity coefficient among the Big Five personality dimensions, and the average true score correlation estimates ranged from the mid .20s to low .30s, with the upper bound of the 90% credibility values of these validity estimates in the upper .30s. Furthermore, to eliminate the need to classify predictors by construct, Hogan and Holland (2003) included in their study only studies using the Hogan Personality Inventory (HPI) to measure personality. In HPI, the prudence construct served as conscientiousness (mean correlation between the two was .51), which the authors found relate to the overall job performance at .24.

**Conscientiousness and Contextual Performance or Citizenship Behavior**

Besides using the overall job performance as criteria measures, studies exist investigating the relationship between the FFM and different aspects of job performance (i.e., task performance and contextual performance), because apparently, at least some supervisors would take both types of performance into consideration when they were asked to rate the dollar value of the employees’ job performance (Orr, Sackett, & Mercer, 1989). According to Motowidlo and Van Scotter (1994), task performance and contextual performance were separate aspects of job performance. Unlike task performance, which is usually task-oriented and required in job description, contextual performance is focused on meeting or exceeding what is prescribed by organizational roles, and spontaneously going beyond the roles to perform behaviors such as helping and cooperating with colleagues, protecting organizations from harm, defending organization’s reputation, undertaking self-development, and so on (Katz & Kahn, 1966). Inspired by studies as such, Hurtz and Donovan (2000) explored the criterion-related validity of the Big Five for task versus contextual performance, and discovered that the true validity coefficients of conscientiousness were equal to .15 for task performance, and .18 and .16 for job dedication and interpersonal facilitation, respectively, both of which were considered to be facets of contextual performance, according to Van Scotter and Motowidlo (1996). Hogan and Holland (2003) broke down overall job performance to getting ahead (task performance) and getting along (contextual performance), and their finding was that the estimated true validity of prudence for contextual performance was .31, which was higher than that of task performance (*ρ* = .20). Therefore, prudence was valid for predicting criteria reflecting both getting a long and getting ahead at work, but more specifically, getting along was better predicted by prudence.

Sometimes used almost as an interchangeable concept of contextual performance in industrial and organizational psychology, organizational citizenship behavior (OCB) also has been a variable whose relationship with the FFM interests a lot of researches. And like contextual performance, OCB was found to be predicted by conscientiousness, too. For example, Organ and Ryan (1995) in their meta-analysis, found that C was the only variable that significantly positively correlated with both the altruism component (directed towards individuals; corrected *r* = .22) and the generalized compliance component of (directed towards organizations; corrected *r* = .30) OCB. Even beyond and beyond neuroticism and extraversion, Miller, Griffin, and Hart (1999) still found conscientiousness to be a valid predictor of OCB (*r* = .42). Similar to the pattern discovered by Hurtz and Donovan (2000) and Hogan and Holland (2003), conscientiousness-citizenship performance correlation was found to be stronger than conscientiousness-task performance correlation. For example, Motowidlo and Van Scotter (1994) found that the correlation between the dependability facet of conscientiousness and citizenship performance was .31, but that between dependability and task performance was only .18, though both were significant. Also, Hense (2001) discovered that conscientiousness correlated at .20 with supervisor-rated citizenship performance, but only at .10 with task performance rated by the same source. Source of citizenship ratings was found to influence the magnitude of the correlation between conscientiousness and citizenship performance, too. In Borman, Penner, Allen, and Motowidlow (2001), the mean uncorrected, sample-size weighted correlation between conscientiousness and citizenship performance was .24, if studies using self-rated and other-rated citizenship performance were included, and the correlation dropped slightly (*r* = .19) when studies using self-rated citizenship performance were excluded.

**Global Conscientiousness and Narrow Facets of Conscientiousness**

Researchers were also wondering if narrow facets of conscientiousness also predict job performance. So Dudley, Orvis, Lebiecki, and Cortina (2006) conducted a meta-analysis examining the degree to which narrow traits of conscientiousness (i.e., achievement, dependability, order, and cautiousness) predict job performance. What they found was that the type of performance was indeed functioning as a moderator of the relationship between these four narrow traits and job performance. The estimated true score validity of achievement was the highest for task performance (*ρ* = .25), while for contextual performance criteria such as job dedication, interpersonal facilitation, and for counterproductive work behavior (CWB), dependability had the greatest absolute magnitude estimated true score validity (*ρ* = .46, *ρ* = .23, and *ρ* = -.34, respectively). Furthermore, narrow traits of conscientiousness also were reported to have incremental validity above and beyond global conscientiousness, but the magnitude depends on the particular type of criteria. For job dedication and CWB, narrow traits explained a substantial amount of variance above and beyond global conscientiousness (*ΔR2*= .259 and *ΔR2*= .136, respectively). In particular, dependability was found to be the best predictor for dedication. For overall job performance and task performance, however, narrow traits explained only a small to moderate portion of variance (*ΔR2*= .037 and *ΔR2*= .046, respectively).

Dudley et al. (2006) reported that occupational type also turned out to be a moderator of the relationship between narrow conscientiousness traits and overall job performance. Achievement had the highest validity for sales workers (*ρ* = .28), and customer service (*ρ* = .19), while dependability had the highest validity for managers (*ρ* = .27) and skilled and semiskilled workers (*ρ* = .27). And in terms of incremental validity, for customer service positions, the percentage of variance explained by the narrow traits over and above global conscientiousness was small, while it’s moderate to substantial for the other three types of occupations. Therefore, narrow conscientiousness traits contribute to the prediction of overall performance in some occupations but not others. However, in 2013, Salgado, Moscoso, and Berges used a Schmid-Leiman transformation that excluded the common variance from the facets of conscientiousness, and found that the facet measure containing only specific variance, did not predict job performance, nor did they have any incremental validity above and beyond conscientiousness. This finding was consistent with a couple of other studies including McManus and Kelly (1999), and Allen, Facteau, & Facteau (2004). In spite of this, most studies on this topic have supported the hypothesis that conscientiousness is a more valid predictor of citizenship performance, than of task performance (Borman et al., 2001).

**Conscientiousness and Other Types of Performance**

Besides individual job performance, O’Neill and Allen (2011) found that among the Big Five personality dimensions, conscientiousness was also a somewhat unique predictor of team performance, and the mean correlation between conscientiousness composite and team performance was .31. A longitudinal study reported that self-reported conscientiousness at adolescence was correlated with self-reported CWB in adulthood 18 years later (*r* = -.16 with both CWB-I and CWB-O, and *r* = -.18 with total CWB; Le, Donnellan, Spilman, Garcia, & Conger, 2014).

**References**

Allen, T. D., Facteau, J. D., & Facteau, C. L. (2004). Structured interviewing for OCB: Construct validity, faking, and the effects of question type.*Human Performance, 17*(1), 1-24. doi:http://dx.doi.org.proxy2.library.illinois.edu/10.1207/S15327043HUP1701\_1

Anderson, G., and Viswesvaran, C. (1998) ‘*An update of the validity of personality scales in personal selection: A meta analysis of studies published after 1992*’. Paper presented at the 13th Annual Conference of the Society of Industrial and Organizational Psychology, Dallas.

Barrick, M. R., & Mount, M. K. (1991). The big five personality dimensions and job performance: A meta-analysis.*Personnel Psychology, 44*(1), 1-26. Retrieved from http://search.proquest.com.proxy2.library.illinois.edu/docview/617946789?accountid=14553

Barrick, M. R., Mount, M. K., & Judge, T. A. (2001). Personality and performance at the beginning of the new millennium: What do we know and where do we go next? *International Journal of Selection and Assessment, 9*(1-2), 9-30. doi:http://dx.doi.org.proxy2.library.illinois.edu/10.1111/1468-2389.00160

Behling, O. (1998). Employee selection: Will intelligence and conscientiousness do the job?. *The Academy of Management Executive (1993-2005)*, 77-86.

Borman, W. C., Penner, L. A., Allen, T. D., & Motowidlo, S. J. (2001). Personality predictors of citizenship performance. International Journal of Selection and Assessment, 9(1-2), 52-69. doi:http://dx.doi.org.proxy2.library.illinois.edu/10.1111/1468-2389.00163

Dudley, N. M., Orvis, K. A., Lebiecki, J. E., & Cortina, J. M. (2006). A meta-analytic investigation of conscientiousness in the prediction of job performance: examining the intercorrelations and the incremental validity of narrow traits. *Journal of Applied Psychology*, *91*(1), 40.

Hense III, R. L. (2001). *The Big Five and contextual performance: Expanding person-environment fit theory* (Doctoral dissertation, ProQuest Information & Learning).

Hogan, J., & Holland, B. (2003). Using theory to evaluate personality and job-performance relations: A socioanalytic perspective.*Journal of Applied Psychology, 88*(1), 100-112. doi:http://dx.doi.org.proxy2.library.illinois.edu/10.1037/0021-9010.88.1.100

Hurtz, G. M., & Donovan, J. J. (2000). Personality and job performance: The big five revisited.*Journal of Applied Psychology, 85*(6), 869-879. doi:http://dx.doi.org.proxy2.library.illinois.edu/10.1037/0021-9010.85.6.869

Katz, D., & Kahn, R. L. (1966). *The social psychology of organizations* Wiley, Oxford. Retrieved from http://search.proquest.com.proxy2.library.illinois.edu/docview/615467105?accountid=14553

Le, K., Donnellan, M. B., Spilman, S. K., Garcia, O. P., & Conger, R. (2014). Workers behaving badly: Associations between adolescent reports of the big five and counterproductive work behaviors in adulthood.*Personality and Individual Differences, 61-62*, 7-12. doi:http://dx.doi.org.proxy2.library.illinois.edu/10.1016/j.paid.2013.12.016

McManus, M. A., & Kelly, M. L. (1999). Personality measures and biodata: Evidence regarding their incremental predictive value in the life insurance industry. *Personnel Psychology, 52*(1), 137-148. Retrieved from http://search.proquest.com.proxy2.library.illinois.edu/docview/619420262?accountid=14553

Miller, R. L., Griffin, M. A., & Hart, P. M. (1999). Personality and organizational health: The role of conscientiousness.*Work & Stress, 13*(1), 7-19. Retrieved from http://search.proquest.com.proxy2.library.illinois.edu/docview/619409978?accountid=14553

Motowidlo, S. J., & Van Scotter, J. R. (1994). Evidence that task performance should be distinguished from contextual performance.*Journal of Applied Psychology,79*(4), 475-480. doi:http://dx.doi.org.proxy2.library.illinois.edu/10.1037/0021-9010.79.4.475

O'Neill, T. A., & Allen, N. J. (2011). Personality and the prediction of team performance. European Journal of Personality, 25(1), 31-42. doi:http://dx.doi.org.proxy2.library.illinois.edu/10.1002/per.769

Organ, D. W., & Ryan, K. (1995). A meta-analytic review of attitudinal and dispositional predictors of organizational citizenship behavior.*Personnel Psychology, 48*(4), 775-802. Retrieved from http://search.proquest.com.proxy2.library.illinois.edu/docview/618918996?accountid=14553

Orr, J. M., Sackett, P. R., & Mercer, M. (1989). The role of prescribed and nonprescribed behaviors in estimating the dollar value of performance.*Journal of Applied Psychology, 74*(1), 34-40. doi:http://dx.doi.org.proxy2.library.illinois.edu/10.1037/0021-9010.74.1.34

Salgado, J. F. (1997). The five factor model of personality and job performance in the european community.*Journal of Applied Psychology, 82*(1), 30-43. doi:http://dx.doi.org.proxy2.library.illinois.edu/10.1037/0021-9010.82.1.30

Salgado, J. F., Moscoso, S., & Berges, A. (2013). Conscientiousness, its facets, and the prediction of job performance ratings: Evidence against the narrow measures.*International Journal of Selection and Assessment, 21*(1), 74-84. doi:http://dx.doi.org.proxy2.library.illinois.edu/10.1111/ijsa.12018

Tett, R. P., Jackson, D. N., & Rothstein, M. (1991). Personality measures as predictors of job performance: A meta-analytic review. *Personnel Psychology,44*(4), 703-742. Retrieved from http://search.proquest.com.proxy2.library.illinois.edu/docview/618107386?accountid=14553

Van Scotter, J. R., & Motowidlo, S. J. (1996). Interpersonal facilitation and job dedication as separate facets of contextual performance.*Journal of Applied Psychology, 81*(5), 525-531. doi:http://dx.doi.org.proxy2.library.illinois.edu/10.1037/0021-9010.81.5.525