Moderating effect of personality on the relationship between Affective Organisational Commitment and Organisational Citizenship Behaviour

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Abstract

Existing research has frequently linked affective organisational commitment with organisational citizenship behaviour. This cross-sectional study aimed to investigate the moderating role of each of the big five personality dimensions on this relationship to fill a perceived gap in the literature. As hypothesised, a Pearson correlation coefficient revealed that affective organisational commitment was positively correlated with organisational citizenship behaviour. A moderated hierarchical multiple regression analysis using standardised variables revealed that, as hypothesised, emotional stability acted as a moderator, while extraversion and intellect/imagination did not. Contrary to what was hypothesised, conscientiousness and agreeableness were found not to moderate the relationship between affective organisational commitment and organisational citizenship behaviour.
Introduction

What is Organisational Citizenship Behaviour

Organisational Citizenship Behaviour (OCB) is a class of organisational behaviour that according to Organ (1988, p. 4) is discretionary, not explicitly recognised by a formal reward system and that as a whole promotes effective functioning of an organisation. Clarifying and underscoring the discretionary nature of this type of behaviour, this author also notes that “by discretionary, we mean that the behaviour is not an enforceable requirement of the role or the job description, that is, the clearly specifiable terms of the person’s employment contract with the organization; the behaviour is rather a matter of personal choice, such that its omission is not generally understood as punishable” [italics added] (Organ, 1988, p. 4). Although there are critics who argue that this behaviour is in fact not discretionary the definition offered by Organ (1988) is generally accepted. Unfortunately there is less consensus about how it should be modelled. In particular there are differences among researchers regarding the dimensionality of any proposed OCB construct.

The five dimensional model that Organ (1988) presents appears to be the most widely used model in research to date. In this model, Organ proposed a multidimensional construct containing the five dimensions of altruism, courtesy, conscientiousness, civic virtue, and sportsmanship. Altruism refers to helping others in the workplace, courtesy is another form of helping behaviour but one which is focused on preventing work related conflicts with others. Conscientiousness consists of behaviours that go well beyond the minimum role requirements of the organisation (Law, Wong, & Chen, 2005). These behaviours indicate that employees accept
and adhere to the rules, regulations, and procedures of the organisation. Civic virtue is characterised by behaviours that indicate the employee’s deep concerns and active interest in the life of the organisation (Law et al., 2005). Employees high in civic virtue might attend meetings that are not mandatory but considered important and keep abreast of changes in the organisation. Sportsmanship relates to behaviours which sees the employee not consuming a lot of time complaining about trivial matters. Those employees which have high levels of sportsmanship behaviours focus on the positive side of things rather than what’s wrong.

Another popular model of OCB (Williams & Anderson, 1991) proposes a two dimensional model, with a construct for OCB-I; citizenship behaviours directed towards individuals in an organisation and made up of altruism and courtesy and OCB-O; citizenship behaviours directed towards an organisation itself and consisting of conscientiousness, civic virtue, and sportsmanship. Many authors however, have argued against multidimensional constructs altogether and have thus used one-dimensional or overall OCB measures in their research. Indeed in the case of the Organ (1988) model, a meta-analysis of the OCB literature by LePine, Erez and Johnson (2002) found that the five dimensions of OCB proposed in this model are very highly correlated and do not have much differentiation among antecedents, indicating some overlap in the dimensions. This finding by LePine et al. (2002) is supported by Hoffman, Blair, Meriac, and Woehr (2007) who, after a meta-analysis looking at the various conceptualizations of OCB note that "current operationalizations of OCB are best viewed as indicators of a general OCB factor..., there is likely little to be gained through the use of separate dimensional measures as opposed to an overall composite measure" [italics added].
Both LePine et al. (2002) and Hoffman et al. (2007) lend weight to the suggestion that a single overall measure of OCB is most appropriate.

Notwithstanding the competing models of OCB, there exists a large body of research using various models and measures showing that this kind of so-called ‘Good Soldier Syndrome’ behaviour has positive consequences on both an individual and organisational level. A meta-analysis of 168 OCB related samples (n = 51,235) by Podsakoff, Whiting, Podsakoff and Blume (2009) showed OCB to be related to such individual constructs as managerial ratings of employees and reward allocation decisions. On the organisational level, OCB was found to be related to a number of outcomes such as efficiency, productivity, reduced cost, customer satisfaction and turnover. These and other individual and organisational consequences reported and discussed by Podsakoff et al. (2009) in their seminal research are described in more detail next.

**Individual level consequences of Organisational Citizenship Behaviour**

In their meta-analysis review Podsakoff et al. (2009) noted a positive corrected correlation of .60 between OCBs and performance rating of employees by managers while also noting a positive corrected correlation of .57 between OCBs and reward allocation decisions. These findings are consistent with prior research in terms of both performance rating (Allen & Rush, 1998; MacKenzie et al., 1991; Werner, 1994) and reward recommendation decisions (Allen & Rush, 1998; Johnson, Erez, Kiker, & Motowidlo, 2002) thus is it clear that those employees who exhibit higher levels of OCB fare better than those who exhibit lower levels of OCB on these two important workplace variables. Podsakoff et al. (2009) speculate that increased performance of OCBs by an employee may cause managers to both rate that
employee’s performance higher and to decide to allocate them more rewards as a form of reciprocity because OCBs such as helping and civic virtue are recognized by them to make their own jobs easier. Since it is believed that performance of OCBs are optional, many managers view them as an indirect measure of how committed employees are to an organisation (Shore, Barksdale & Shore, 1995), thus rewarding those that are more committed.

Further Podsakoff et al. (2009) note that yet another reason for the link between OCB and positive performance and reward allocation outcomes may be that managers simply like employees that carry out these type of behaviours more and are thus inclined to reward them. Given that the 20 item OCB construct by Fox, Spector, Goh, Bruursema and Kessler (2012) used in the present study contains individual behavioural items such as ‘Picked up a meal for others at work’, ‘Lent a compassionate ear when someone had a personal problem’ and ‘Helped a co-worker who had too much to do’ this is not too surprising. This is because employees who indicate themselves as having done these or similar behaviours often paint a picture of themselves as highly conscientious, caring, kind hearted and altruistic individuals. Lefkowitz (2000) has discussed the influence of liking or positive affective regard on performance rating in particular. Based on a review of 24 studies, he notes that generally a rater’s affective regard for the person they are rating is indeed frequently associated with higher performance ratings.

In addition Podsakoff et al. (2009) also hypothesized and identified a negative correlation between OCB and both employee turnover intention and actual turnover based on the work of Chen (2005, as cited in Podsakoff et al., 2009) and a number of other authors (Chen, 2005 as cited in; Chen, Hui, & Sego, 1998; Mossholder, Settoon, & Henagan, 2005). In addition
Podsakoff et al. also reported that OCB was negatively correlated with absenteeism. Furthermore, Podsakoff et al. report corrected negative correlations between OCBs and turnover intention, actual turnover and absenteeism of -.22, -.14 and -.16 respectively. It is suggested this is the case as OCB can be seen as a proxy for how committed an individual is to the organisation, those individuals who perform high amounts of OCB are seen to be highly committed to the organisation and thus are less likely to report an intention to leave, actually leave or have high levels of absenteeism. It can be seen that the correlations for these withdrawal behaviours are significantly weaker than the positive correlations observed between OCB and both performance rating and reward allocation decisions. This can be understood due to the nature and significance of these behaviours. Leaving an organisation for example is a big decision and one which requires many factors other than commitment to be taken into account. Similarly with absenteeism, the very nature of this behaviour means that correlations will likely be low with most non health related measures. Of course a second view on why the correlations are quite weak might be that OCB is not in fact a valid proxy for commitment.

**Organisational level consequences of Organisational Citizenship Behaviour**

Organisational level consequences reported by Podsakoff et al. (2009) and other authors include a number of effectiveness related items such as those related to efficiency (Podsakoff & MacKenzie, 1997), productivity (Podsakoff, Ahearne, & MacKenzie, 1997), reduced cost (Walz & Niehoff, 2000), profitability (Koys, 2001), customer satisfaction (Koys, 2001) and turnover (Chen et al., 1998).

Podsakoff et al. (2009) observed a .43 positive correlation between OCB and overall organisational effectiveness as measured by both objective and subjective measures. On a more
granular level they observed positive correlations of .37, .40 and .15 for the relationships between OCB and productivity, efficiency and profitability respectively while also observing a negative correlation of -.52 between levels of OCB and organisational costs. In addition, authors such as Walz and Niehoff (2000) have reported that performance of OCB have led to reduced costs.

In a longitudinal study of restaurants, Koys (2001) found that OCB level at year 1 significantly predicted profitability in year 2 with a correlation of .46. While accepting their sample size of 28 restaurants is limiting, they argue that a longitudinal study provides a significant advantage over cross-sectional studies looking at similar measures as it allows the direction of the potential relationship between variables such as OCB and profitability to be determined. Cross-sectional studies cannot, for example, draw cause and effect conclusions as to whether OCBs cause higher levels of profits or whether higher levels of profits might somehow cause higher levels of OCBs, perhaps via better resourced financed HR campaigns or better worker moral for instance. By comparing the year one OCB effect on year two profit with the year one profit effect on year two OCB, Koys was accurately able to determine that indeed it is the performance of OCB in their study that caused an increase in profit rather than the other way around. Koys reported a relatively high correlation of .46 for the relationship between OCB and profitability which is significantly larger than the .15 correlation reported by Podsakoff et al. (2009). Considering however, the small sample size (n = 28) and, perhaps more importantly, the fact that employees in restaurants are very heavily involved in customer interaction and thus performance of OCB is likely to impact a restaurants bottom line more than another industry, this difference isn’t extreme.
Suggested reasons why OCB might influence organisational effectiveness are reviewed by Podsakoff, MacKenzie, Paine and Bachrach (2000) and Podsakoff et al. (2009) and include the notion that when senior employees help others it assists them to become productive employees faster. Additionally it is believed that employees who offer suggestions about improving the way work is done may help their manager improve unit effectiveness, reduce costs or free up the manager to spend time on more productive tasks such as strategic planning. The very nature of organisational citizenship behaviour lends itself to enhanced team spirit, morale, and cohesiveness, and thus may reduce the need for group members (or managers) to spend energy and time on group maintenance functions and enhancing the organisations ability to attract and retain the best people (Podsakoff et al., 2009).

**Predictors of Organisational Citizenship Behaviour**

Given the potential benefits to the individual and particularly the organisation of OCB, it is not surprising that significant research across a wide variety of sectors and cultures has been conducted into its antecedents. A large number of these antecedents have been reported including job satisfaction (Mohammad, Habib & Alias, 2011; Tsai & Wu, 2010), perceptions of organisational justice, (Lv, Shen, Cao, Sun & Chen, 2012; Williams, Pitre & Zainuba, 2002), organisational commitment (Mohamed & Anisa, 2012), dispositional factors such as levels of big five personality traits (Chiaburu, Oh, Berry, Li & Gardner, 2011; Kumar, Bakhshi & Rani, 2009) and emotional intelligence (Salarzehi, Yaghoubi, Naroe & Sin 2011), altruism and leadership.

**Job Satisfaction**

Some of the earliest research into the antecedents of OCB relates to job satisfaction. Organ and Ryan (1995) who examined a number of OCB antecedents reported a moderate link between job satisfaction and altruism of .24 and .23 when self-report measures were eliminated
in a meta-analysis of 55 studies. Altruism represents those forms of OCB which provide aid to a specific work colleague with an organisationally relevant task or problem. Significantly Organ and Ryan (1995) controlled for the effect of possible subjective bias in self-report ratings of levels of OCB (altruism in their case) and thus reported and compared correlations of both independent and self-report measures. While recognising the weakness of the self-report approach, they note that independent measures are not perfect either and in fact it is likely that much OCB is likely to go unnoticed by peers and supervisors. Although for the most part the differences in correlations between independent and self-report measures for various predictor and criterion variables were small, the research by Organ and Ryan (1995) was still a significant contribution to the literature with respect to the control of possible subjective bias.

More recent empirical research (Mohammad et al., 2011; Tsai & Wu, 2010) looked at the effect of job satisfaction on OCB. In a higher education context Mohammed et al. (2011) examined correlations between OCBs targeted towards individual (OCBI) and organisations (OCBO) and both intrinsic and extrinsic job satisfaction. They reported positive correlations between both intrinsic and extrinsic job satisfaction and OCB directed towards the organisation (OCBO) but not for OCB directed to an individual (OCBI). Both intrinsic and extrinsic job satisfaction measure an individual’s affect towards the role itself, as in what they actually do and towards the conditions of the role such as pay and job security. Muhammad et al. therefore speculate that since the role, pay, job security and similar items are derived from the organisation itself rather than individuals in the organisation that this is the reason job satisfaction has significant positive associations with OCB behaviours directed towards the organisation rather
than the individual. It should be noted however that they originally hypothesised that both measures of job satisfaction would significantly predict both forms of OCB.

**Organisational Justice**

In a study conducted in 11 Chinese hospitals (n = 241), Lv et al. (2012) used the five dimensional model of Organisational Citizenship proposed by Organ (1988) and reported positive, albeit weak correlations between perceptions of organisational justice and all five OCB dimensions of altruism (.17), courtesy (.14), conscientiousness (.22), civic virtue (.14) and sportsmanship (.19). Furthermore research by Williams et al. (2002) also provides support for the link between perceptions of organisational justice and both performance of OCB and intentions to perform OCB. Of particular note was a positive correlation between interactional justice and intention to perform OCB of .45. The relationship between interactional justice and actual performed OCB however was reported at .21, and thus is more in line with the findings of Lv et al. (2012) above.

**Big Five Personality Traits**

The most popular of all the trait theories is Costa and McCrae's (1992) five factor model commonly referred to as the big 5 model. Based on factor analysis, this theory posited that the five traits of openness, conscientiousness, extraversion, agreeableness and neuroticism are found in varying degrees in all people in all cultures of the world. Openness refers to a person's openness to new experiences, extraversion and neuroticism are a measure of sociability and emotional stability respectively. While conscientiousness relates to a person's degree of self-discipline and control. Individuals who score high on this are self-disciplined, determined, organised and dutiful whereas individuals who score low on this trait are said to be careless, easily distracted and undependable. Finally agreeableness is a measure of a person’s general
interpersonal sociability. Those that score high on agreeableness might be described as soft-hearted and compassionate, good natured, helpful and cooperative while those who score low on this trait might be said to be rude, uncooperative and manipulative.

Given the characteristics of those high in both conscientiousness and agreeableness it is not surprising that significant amounts of research have found them to be weak to moderate predictors of various forms of organisational citizenship behaviour. While the link between extraversion and OCB has typically been shown to be very weak, research has found that neuroticism/emotional stability and recently (Chiaburu et al., 2011) openness to experience/intellect/imagination can also act a valid predictors of OCB. Due to the depth and breadth of related studies, this study's review of existing personality-OCB literature is limited to a number of meta-analysis studies (Borman, Penner, Allen, & Motowidlo, 2001; Chiaburu et al., 2011; Organ & Ryan, 1995).

A seminal publication looking at the relationships between both attitudinal and dispositional factors, including some of those captured by the five factor model is the 55 sample meta-analysis by Organ and Ryan (1995). These authors used a two dimensional model of OCB (Smith, Organ, & Near, 1983) which included altruism and general compliance and examined correlates between these forms of OCB and a number of attitudinal and dispositional traits such as conscientiousness and agreeableness. Altruism in the workplace consists essentially of helping behaviours, while general compliance refers to those behaviours which serve to benefit an organisation in several ways. Low rates of absenteeism and rule following for example help to keep the organisation running efficiently. A compliant employee does not engage in behaviours
such as taking long breaks or using work time for private matters. Smith et al. (1983) believed that when these types of behaviours are minimised the workforce is naturally more productive. In their analysis, Organ and Ryan (1995) reported corrected positive correlations between conscientiousness and agreeableness with altruism of .22 and .13 respectively. Reported correlations between conscientiousness and agreeableness with general compliance on the other hand were .30 and .11 respectively.

A recent meta-analysis (Chiaburu et al., 2011) of 87 samples reported on correlations between the five factors of personality from Costa and McCrae’s (1992) model for both forms of OCB, those directed towards the organisation (OCBO) and those directed towards individuals in the organisation (OBCI). Reported corrected correlations for the link between openness (.20), conscientiousness (.20), extraversion (.02), agreeableness (.19), and neuroticism/emotional stability (.12) with OCBO showed that while openness and conscientiousness were the strongest predictor traits for OCBO, extraversion had no effect. Correlations for OCB were similar with Chiaburu et al. reporting positive but weak correlations for openness (.20), conscientiousness (.25), extraversion (.11), agreeableness (.18), and neuroticism/emotional stability (.14). Again conscientiousness is a stronger predictor than most other traits, while extraversion is again the weakest. Although only slight, the increase in correlation for extraversion-OCBO compared to extraversion-OBCI is not surprising as OBCI is focused towards other individuals and extraversion is essentially a measure of sociability.

The similarity of the correlations for both forms of OCB is in contrast to findings of Mohammad et al. (2011) who reported that job satisfaction significantly predicted citizenship
behaviours towards the organisation itself but not the individuals in the organisation. Incidentally Chiaburu et al. (2011) also reported correlations for a third form of OCB, OCB-CH which refers to change orientated citizenship behaviour. Discussion of this form of OCB is outside the scope of this study however. Chiaburu et al. (2001) have provided evidence that personality traits, particularly conscientiousness, agreeableness and openness to experience can serve as predictors for both forms of OCB. Additional evidence supporting this notion is provided by Borman et al. (2001) who have reviewed the empirical evidence linking personality constructs with organisational citizenship behaviour.

Borman et al. (2001) considering studies only published subsequent to Organ and Ryan (1995), looked at a number of big five traits including conscientiousness, agreeableness and extraversion as part of their review and using a partial meta-analysis (without correction) reported weighted mean correlations (uncorrected) of .24, .13 and .08 for these three traits respectively. When excluding self-report measures, correlations between conscientiousness (.19), agreeableness (.13) and extroversion (.06) with organisational citizenship behaviours were weakened slightly for conscientiousness and extraversion. Borman et al. note in their conclusion that although they did not conduct a full meta-analysis with correction for problems such as criterion unreliably and restriction in range, a correction of .08 based on previous meta-analyses for conscientiousness is likely appropriate. Thus they argue that an overall corrected correlation of .32 appears to be a reasonable point estimate for the conscientiousness-OCB relationship (Borman et al., 2001), while suggesting .27 is accurate when self-rating criteria is removed.
Organisational Commitment

Aside from job satisfaction, organisational justice and personality traits, organisational commitment also features prominently in the literature related to the antecedents of OCB. It is this antecedent that is of most interest to the present research. The present research aims to further explore the link between affective organisational commitment and organisational citizenship behaviour by examining what, if any moderating effects personality traits such as those contained in the five factor or big five model of personality (Costa & McCrae, 1992) have on this relationship. Research into the direct effects of these personality traits has been discussed above, with various sources supporting a correlation between the two variables. Existing research into the effect affective organisational commitment has on OCB directly is discussed next and subsequent to that the literature relating specifically to the moderating effect of big five personality traits on the commitment-OCB relationship is discussed.

Organisational commitment can be thought of as an individual's psychological or emotional attachment to an organisation. A number of different constructs have been created to measure organisational commitment, the most popular (Cohen, 2007) of which is Meyer and Allen’s (1991) Three Component Model (TCM) of commitment. In this model, Meyer and Allen argue that organisational commitment is actually made up of three components; affective commitment, continuance commitment and normative commitment, each of which correspond to a different psychological state.

Affective commitment refers to an affective or emotional attachment to the organisation such that the strongly committed individual identifies with, is involved in, and enjoys
membership in the organisation. The continuance component is defined as the perception of costs associated with leaving the organisation such that employees with high levels of continuance commitment stay with an organisation as they are aware of the need, risks, sacrifices and low options associated with leaving. Finally normative commitment refers to a sense of requirement to continue employment. Employees with an elevated level of normative commitment believe that they have to remain in the organisation or job as they feel it is right (Meyer, Allen, & Smith, 1993). In sum, employees with strong affective, continuance and normative commitment remain in an organisation because want to, need to and feel they ought to respectively (Allen & Meyer, 1990).

Despite its dominance (Cohen, 2007) in organisational commitment related research a number of authors (Jaros, 2007; Hoang, 2012; Solinger, Van Olffen, & Roe, 2008) have argued that the Three Component Model is a flawed approach to measuring commitment primarily because of its inclusion of continuance and normative sub constructs. Solinger et al. (2008) in an in depth critique of the model argue that in line with the Theory of Reasoned Action (Ajzen & Fishbein, 1980; Fishbein & Ajzen, 1975 as cited in Solinger et al., 2008) that only affective commitment correctly represents organisational commitment as it represents a general attitude toward an organisation. Continuance and normative commitment on the other hand correspond not to attitudes towards an organisation but rather to attitudes towards a specific behaviour or act such as staying in or leaving the organisation. Solinger et al. therefore argue that grouping these constructs which they believe are qualitatively different under one general label is logically incorrect and that organisational commitment should be considered strictly as an affective or
emotional attitude toward an organisation. TCM (Meyer & Allen, 1991) they conclude, is best viewed as a model of predicting turnover rather than of organisational commitment.

Therefore, in line with the analysis of Solinger et al. (2008) the present study opts to use affective commitment, which is an individual's emotional attachment or attitude to an organisation as the primary and sole measure of organisational commitment. Consequently the present study restricts its literature review of the links between organisational commitment and OCB specifically to those research studies which at least use the affective or emotional form of organisational commitment.

A number of researchers (Lavelle et al., 2009; Meyer, Stanley, Herscovitch, & Topolnytsky, 2002; Ng & Feldman, 2011) has reported positive correlations between AOC and OCB. The underlying model associated with explaining why these correlations might exist, that is why committed (indeed also those individuals with high levels of job satisfaction or high levels of perceived organisational justice) individuals appear to perform more OCB is based on social exchange theory (Konovsky & Pugh, 1994; Lavelle et al, 2009). Social exchange theory states that employees form relationships at work which involve the reciprocal exchange of socioemotional benefits. Researchers argue that high-quality social exchange relationships (as pointed to by commitment, for example) are likely to prompt employees to engage in citizenship behaviours because employees are likely to feel a relational obligation to engage in behaviours that have positive consequences for their relationship partners (Lavelle et al., 2009).
Meyer et al. (2002) in a meta-analysis looking at the antecedents, correlates and consequences of organisational commitment found a moderate correlation of .32 between AOC and OCB from 22 studies (n = 6,277). Meyer et al. (2002) also conducted another analysis to separate correlations for self-report and supervisor reported levels of OCB. Similar to the Organ and Ryan’s (1995) study Meyer et al. (2002) also found that correlations for self-reported levels of OCB (.37) were higher than for independent or supervisor reported levels of OCB (r = .27), although the differences in Organ and Ryan (1995) were quite small. Given that a meta-analysis is a study which uses statistical techniques to average out differences across multiple studies they reveal a clear and consolidated picture of data. Meyer et al.’s (2002) study is therefore very significant to the present study as it provides strong evidence, of, at least a moderate link between AOC and OCB.

Ng and Feldman (2011), also using a meta-analytical approach observed that across 40 studies (n = 11,416) the relationship between affective organisational commitment and independent measures of levels of OCB was .23. The primary focus of their study however was to examine if organisational tenure acted as a moderator between these two variables. They found that before employees had 10 years of service with an organisation, the strength of the affective commitment-OCB relationship increased as tenure increased. After 10 years however, the strength of the affective commitment-OCB relationship decreased as tenure increased. Thus although the correlation of .23 is roughly consistent with the .32 reported by Meyer et al. (2002), Ng and Feldman have demonstrated that it was not commitment alone that was responsible for the strength of this relationship.
Support for the link between AOC and some forms of OCB is also provided by Lavelle et al. (2009) who using a multifoci approach to OCB note a correlation between affective organizational commitment and OCBO, citizenship behaviours directed towards the organisation of .43. They found, however, that affective commitment did not predict organisational citizenship behaviours directed towards the individual (r = .07). This finding has parallels to that of Mohammad et al, (2011) who reported that job satisfaction significantly predicted citizenship behaviours towards the organisation itself but not the individuals in the organisation. Taken together these findings lend weight to the notion that OCB should be viewed as a multidimensional construct. Nonetheless, the strong positive correlation of .43 between AOC and OCBO reported by Lavelle et al. (2009) is significant for the present study. It should be noted however that in this study (n = 106), female respondents made up over 91% of all respondents and thus this should be kept in mind when attempting to generalise results. This is prudent even in light of existing research (Diefendorff, Brown, Kamin, & Lord, 2002; Organ & Ryan, 1995) suggesting gender does not have a significant effect on OCB.

All research however has not consistently demonstrated that AOC predicts OCB. Mohamed and Anisa (2012) for example in a study (n = 299) conducted with employees of a telecommunication company in India using Meyer et al.’s (1993) 6 item revised affective commitment scale found no correlation (r = .09) between affective commitment and organisational citizenship behaviour. The reasons why this may be are unclear. The author does suggest however that their research may go against the findings of previously reported studies due to cultural differences as most previous studies were conducted in western countries. Notwithstanding the findings of Mohamed and Ansia (2012) and even though their study uses
the same exact measure of affective commitment as the present study, given the significant cultural differences coupled with existing western orientated research (Lavelle et al., 2009; Meyer et al., 2002; Ng & Feldman, 2011; Organ & Ryan, 1995) discussed above this study's first hypothesis proposes AOC will correlate with OCB.

**Hypothesis one** Affective organisational commitment (AOC) is positively correlated with organisational citizenship behaviour (OCB)

*Moderating effect of Big 5 Personality Traits.*

A thorough literature search found no studies directly looking at the moderating effect of the big five personality traits of agreeableness, conscientiousness, emotional stability, extraversion and intellect/imagination on the relationship between AOC and OCB. This is disappointing and somewhat surprising given it seems reasonable to expect that personality traits might have an influence on the commitment-OCB relationship. Based however on research outlined above such as the meta-analysis of 55 samples by Organ and Ryan (1995) which found significant links between both agreeableness and conscientiousness with OCB, and other meta-analysis (Borman et al., 2001; Chiaburu et al., 2011) which supported this finding it appears logical to expect high levels of these traits will strengthen the AOC-OCB relationship.

**Hypothesis two:** Agreeableness moderates the relationship between Affective Organisation Commitment and Organisational Citizenship Behaviour. Specifically AOC is more strongly related to OCB among participants who have high levels of agreeableness than among participants that have low levels of agreeableness.
**Hypothesis three:** Conscientiousness moderates the relationship between Affective Organisation Commitment and Organisational Citizenship Behaviour. Specifically AOC is more strongly related to OCB among participants who have high levels of conscientiousness than among participants that have low levels of conscientiousness.

In light of research (Chiaburu et al., 2011; Kumar et al., 2009) showing that low levels of emotional stability/high levels of neuroticism correlate negatively with OCB the present study predicts low levels of emotional stability will act to buffer a participant's commitment level.

**Hypothesis four:** Emotional stability moderates the relationship between Affective Organisation Commitment and Organisational Citizenship Behaviour. Specifically AOC is more strongly related to OCB among participants who have high levels of emotional stability than among participants that have low levels of emotional stability.

While varying studies have indicated significant correlations for agreeableness, conscientiousness and emotional stability with OCB, extraversion and intellect/imagination have traditionally been reported as having very weak, mostly non-significant correlations with OCB.

**Hypothesis five:** Extraversion does not moderate the relationship between Affective Organisation Commitment and Organisational Citizenship Behaviour.

**Hypothesis six:** Intellect/Imagination does not moderate the relationship between Affective Organisation Commitment and Organisational Citizenship Behaviour.
Summary of Rationale

Organisational citizenship behaviour is helpful or constructive behaviour optionally carried out by employees and directed toward either individuals in an organisation or an organisation itself. As discussed above, performance of OCB by employees has been linked to very significant effectiveness related outcomes for an organisation such as improvement in the key performance indicators of efficiency, productivity, cost, profitability, customer satisfaction, turnover and more. Given these powerful benefits to the organisation, much research has sought to determine the antecedents or predictors of OCB. Prominent in the literature are those antecedents discussed above including job satisfaction, perception of organisational justice, personality traits and organisational commitment.

The rationale for the present study is to contribute to the existing body of research related to the antecedents of OCB. In particular, this study seeks to explore further one of these reported antecedents; organisational commitment and its relationship with organisational citizenship behaviour by examining what moderating role if any do the big five personality traits have on this relationship. It is believed this is a useful contribution as a literature review has not noted research specifically looking at the impact of big five traits on the commitment-OCB relationship, although research looking at the big five-OCB and commitment-OCB relationships directly is plentiful.

From an applied viewpoint this study hopes to shed light on why some employees with similar commitment levels may perform OCBs but others won’t. It is believed findings can contribute to existing research relating to the impact of personality in the workplace and can be thus input into personnel selection considerations. Knowing the benefits of OCB which are
outlined above, if an organisation wants to encourage these types of behaviours, this research
seeks to answer the question is AOC enough, or can two committed individuals with different
personalities exhibit significantly different levels of OCB and thus must an organisation's efforts
to create a culture of OCB begin as early as the personnel selection stage? This study aims to
answer these questions and thus hopes to contribute to the existing body of evidence in this area.
Methods

Participants
Participants in this study consisted of a convenience sample of individuals recruited from the social network websites Facebook and Twitter as well as the business networking website LinkedIn. Participation was on a voluntary basis and all participants had to agree to an informed consent statement before participating. Additionally exclusion criteria deemed that participants must be over 18 years of age. In all 102 surveys were fully completed. From the final sample size of 102, females represented 52.9% while males represented 47.1%. Age ranges of the study participants were 18-24 (n = 9), 25-34 (n = 46), 33-44 (n = 37), 45-54 (n = 8), 55-64 (n = 2), 65-74 (n = 0) and 75 or older (n = 0).

Design
The study design is correlational in nature. It is mainly quantitative with numerical scores from three surveys being analysed. The three surveys measure affective organisational commitment, organisational citizenship behaviour and big five personality traits. Correlational designs by their nature look for relationships between variables rather than causation, thus this type of design does not allow us to say one variable causes another. Rather we can use our data to estimate how well a variable(s) might predict another. The proposed design contains control variables (gender & age, both nominal), a main effect predictor variable (organisational commitment), a number of moderator variables (big five personality traits) and a criterion variable (organisational citizenship behaviour). All variables except gender and age are scale variables.
Materials

Personality

Personality is measured using the non-proprietary 50 item International Personality Item Pool (IPIP; Goldberg, 1999) representation of the Goldberg (1992) markers for the big five factor model of personality (Costa & McCrae, 1992). The five subscales which make up the IPIP 50 along with their reliability as reported by Goldberg (2001) are extraversion (alpha .87), agreeableness (alpha .82), conscientiousness (alpha .79), emotional stability (alpha .86) and Intellect/Imagination (alpha .84). Of note is that emotional stability and Intellect/Imagination although named differently reflect the common constructs of neuroticism and openness to experience respectively. Similar to reliability, validity is also reported to be high with correlations between the IPIP 50 item measure and the widely validated proprietary NEO-PI-R (Costa & McCrae, 1992) measure ranging from 0.70 to 0.82 (0.85 to 0.92 when corrected for unreliability) according to Goldberg (2001). Further support for the reliability and validity of the 50 item IPIP is provided by Gow, Whiteman, Pattie and Deary (2005) who report that these scales have good internal consistency and relate strongly to major dimensions of personality assessed by two leading personality questionnaires.

Each of the five 10 question subscales contain sentence fragment items such as ‘Am the life of the party’, ‘Have a soft heart’ and ‘Insult people’ which respondents are asked to indicate how accurately they feel describe them using a 5 item scale from ‘Very Inaccurate’ to ‘Very Accurate’. To minimise the impact of acquiescence response bias (Schriesheim & Hill, 1981) negative scoring is used. For items which are positively keyed, responses marked ‘Very Inaccurate’ are assigned a value of 1, while responses marked ‘Very Accurate’ are assigned a value of 5, with values of 2, 3 and 4 being assigned to ‘Moderately Inaccurate’, ‘Neither
Accurate Nor Inaccurate’ and ‘Moderately Accurate’ respectively. In the case of negatively keyed items all values are reversed. Once numbers are assigned to all of the items in a particular subscale, a sum of these numbers represents the total subscale score. A maximum score of 50 is possible for each subscale with a higher score indicating a higher level of a particular personality trait in a respondent. An overall score computed by combining the scores of the five subscales is not meaningful.

**Affective Organisational Commitment**

Affective organisational commitment which refers to an individual's emotional attachment to an organisation is measured by the affective commitment scale of Meyer et al. (1993). This is a six item measure and is one of three subscales based the Three Component Model (TCM) of commitment (Meyer & Allen, 1991) of organisational commitment. While authors such as Solinger et al. (2008) have raised concerns about the validity of the TCM construct as a whole, the affective commitment subscale itself is reported to be both reliable (alpha .82) and valid (Allen & Meyer, 1996; Allen & Meyer, 2000). In line with the analysis of Solinger et al. (2008) who believe that organisational commitment should be considered strictly as an affective or emotional attitude toward an organisation the other two subscales of the TCM (Meyer & Allen, 1991) were not considered for inclusion.

Usage of this measure involves respondents indicating their levels of agreement with respect to their current organisation to items such ‘I really feel as if this organisation's problems are my own’ and ‘I do not feel like "part of the family" at my organisation’. Levels of agreement are indicated on a 7 point Likert type scale with options ranging from ‘Strongly Disagree’ which for the purposes of scoring is assigned a value of 1 for positively keyed items to ‘Strongly Agree’ which for the purposes of scoring is assigned a value of 7 for positively keyed items.
Given that Meyer et al. (1993) have included negative items to guard against the impact of acquiescence response bias (Schriesheim & Hill, 1981) scoring for these items is reversed, so ‘Strongly Agree’ for example is actually assigned a value of 1. Overall score on this measure is the average of assigned values for all items rather than the sum, thus the maximum score possible is 7. A higher score indicates higher levels of emotional attachment by the respondent towards their present organisation.

**Organisational Citizenship Behaviour**

Organisational citizenship behaviour is measured using the 20 item organisational citizenship behaviour checklist (OCB-C) of Fox et al. (2012). Fox et al. designed this scale to overcome limitations of other organisational behaviour scales such as those discussed in Dalal (2005). Fox et al. reported coefficient alphas for their 20 item OCB checklist of .89 and .94 for two self-report samples, and .94 for a co-worker sample (co-workers reporting on the target employee). These authors also report convergence between their OCB-C and the most frequently used measure of OCB thus providing construct validity evidence.

Respondents of this survey are asked to select how often they have performed a particular type of behaviour such as ‘Offered suggestions for improving the work environment’ and ‘Helped a co-worker who had too much to do’ in their present organisation. Frequency options are presented on a 5 point Likert type scale ranging from ‘Never’ which for scoring purposes is assigned a value of 1 and ‘Every day’ which for scoring purposes is assigned a value of 5. Overall measure score is obtained by summing responses across all items. This measure does not include reverse scoring. The maximum score possible on this measure is 100, with higher scores indicating a higher frequency of organisational citizenship behaviours performed by the respondent.
**Procedure**

The three surveys pertaining to personality, affective organisational commitment and organisational citizenship behaviour were combined along with basic demographic questions into a single composite survey on SurveyMonkey.com whereby all questions were required to be completed by participants. Prior to the survey, an initial landing page which is available in Appendix 1 served as an information and informed consent sheet displaying information such as the nature of the study, information pertaining to the anonymity of the responses and the participants right to withdraw, researcher contact information and consent to participate information. Participants were recruited by sharing the relevant URL for the survey through Facebook, Twitter and LinkedIn. After sufficient responses were collected, the survey was closed and data was exported to CSV format for import into and analysis in IBM SPSS 21.

Analysis for hypothesis one was conducted with a scatterplot and bivariate correlation. Moderator analysis for hypotheses two-six was conducted using the procedure outlined in Howitt and Cramer (2011, p. 474) which standardises the predictor, the moderator and the criterion variables in order to minimise the impact of multicollinearity, while also creating an interaction variable which is a product of the predictor and moderator. The variables are then input into a hierarchical multiple regression model with the predictor and moderator variables entered into block one and the interaction term entered into block two. A moderating effect is deemed to have occurred if the interaction term is significant in the model. Using the formulae described by Howitt and Cramer (2011, p. 477) the B score/regression weights were used to predict the most likely score on the dependent variable (organisational citizenship behaviour) for nine different combinations of low, medium and high levels of a particular trait with low, medium and high levels of organisational commitment. These scores were then plotted onto an interaction line.
chart using Microsoft Excel to give a visual illustration of how different levels of a trait effect the relationship between organisational commitment and organisational citizenship behaviour.
Results

Descriptive Statistics

Demographic Variables

The sample of 102 participants consisted of 54 females and 48 males which corresponds to 52.9% and 47.1% respectively. Figure 1 shows the frequency of the various age categories for the participants. It can be seen that the majority of participants fell within the 25-34 and 35-44 age brackets.

Figure 1. Bar chart showing age ranges of participants
Main effect Predictor and Criterion Variables

The main effect predictor variable of affective organisational commitment had a mean score of 4.06 (SD = 1.6) which given that a score of 7 reflects maximum commitment indicates that on a whole the participants in this sample are only moderately rather than strongly committed to their organisations. Although a Shapiro-Wilk’s test (p < 0.05) suggested the data for affective organisational commitment was not normally distributed, a visual inspection of the corresponding histogram (shown in Figure 2), box plot and normal Q-Q plot diagrams suggested otherwise. These diagrams when combined with a skewness figure of -0.38 (SE = .239) and a kurtosis figure of -0.943 (SE = .474) resulted in affective organisational commitment being considered as being approximately normally distributed for the purposes of analysis.
The criterion variable of organisational citizenship behaviour had a mean score of 64.35 ($SD = 14.65$). As the measure used for this variable has a maximum score of 100 which indicates the highest levels of citizenship behaviour this mean score shows that the sample on average performs a moderate level of these types of behaviours. A Shapiro-Wilk's test ($p > 0.05$) and a visual inspection of the corresponding histogram, box plot and normal Q-Q plot diagrams suggested that organisation citizenship behaviour was approximately normally distributed with a skewness of -.088 ($SE = .239$) and a kurtosis of -.132 ($SE = .474$). Figure 3 shows the distribution of values for organisational citizenship behaviour along with normal curve.
Figure 3. Histogram showing the distribution of values for Organisational Citizenship Behaviour
**Moderating effect Predictor Variables**

Table 1 gives the mean scores for each of the five traits which make up the overall measure of personality. A maximum score of 50 indicates the highest amounts of a particular trait possible.

Table 1: *Descriptive statistics of moderator effect predictor variables*

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agreeableness</td>
<td>42.45</td>
<td>5.26</td>
</tr>
<tr>
<td>Conscientiousness</td>
<td>35.78</td>
<td>5.67</td>
</tr>
<tr>
<td>Emotional Stability</td>
<td>29.08</td>
<td>8.07</td>
</tr>
<tr>
<td>Extraversion</td>
<td>33.12</td>
<td>7.36</td>
</tr>
<tr>
<td>Intellect/Imagination</td>
<td>37.26</td>
<td>5.29</td>
</tr>
</tbody>
</table>

**Inferential Statistics**

**Hypothesis One**

Hypothesis one predicted that affective organisational commitment will be positively correlated with organisational citizenship behaviour. A Pearson correlation coefficient revealed that there was a moderate positive significant relationship between Affective Organisational Commitment ($M = 4.06$, $SD = 1.6$) and Organisational Citizenship Behaviour ($M = 64.35$, $SD = 14.65$) ($r(100) = .28$, $p = .004$). Therefore the null hypothesis is rejected. This relationship can account for 8.01% of variation in levels of Organisational Citizenship Behaviour.
Hypothesis Two

Hypothesis two predicted that agreeableness moderates the relationship between affective organisational commitment and organisational citizenship behaviour and that this relationship is stronger among participants who have high levels of agreeableness than among those that have low levels of it. To test this and other moderating effect hypotheses a hierarchical multiple regression analysis with standardised variables and interaction product term as per Howitt and Cramer (2011, p. 474) was conducted. Age and gender were initially placed in the model, however were subsequently removed for ease of analysis due to them having no effect on the predictive capability of the model.

In the first block, standardised affective organisational commitment and agreeableness variables were included. These variables accounted for a small amount of variance in organisational citizenship behaviour ($R^2 = .07, F(2, 99) = 4.63, p = .012$). Next the interaction variable between organisational commitment and agreeableness was added to the regression model. The addition of the interaction term, however, did not improve the ability of the model to predict organisational citizenship behaviour ($\Delta R^2 = .00, \Delta F(1, 98) = .05, p = .827$). Therefore the hypothesis is rejected and the null hypothesis is accepted.

Figure 4 shows the plot of predicted organisational citizenship levels for different levels of commitment and agreeableness. It can be seen that levels of organisational citizenship behaviour increase as commitment levels increase regardless of the levels of agreeableness.
Hypothesis Three

Hypothesis three predicted that conscientiousness moderates the relationship between affective organisational commitment and organisational citizenship behaviour and that the relationship between these two variables is stronger among participants who have high levels of this trait than among participants that have low levels of it. To test this hypothesis a hierarchical multiple regression analysis was conducted.

In the first block, standardised affective organisational commitment and conscientiousness variables were included. These variables accounted for a small amount of variance in organisational citizenship behaviour ($R^2 = .07$, $F(2, 99) = 4.85, p = .01$). Next the interaction variable between organisational commitment and conscientiousness was added to the regression model. It was found however that the interaction term did not improve the ability of

Figure 4. Predicted organisational citizenship behaviour levels at different levels of commitment and agreeableness
the model to predict organisational citizenship behaviour ($\Delta R^2 = .00, \Delta F(1, 98) = .04, p = .852$). Therefore the hypothesis was rejected and the **null hypothesis was accepted**.

Figure 5 shows the plot of predicted organisational citizenship levels for different levels of commitment and conscientiousness. It can be seen that levels of organisational citizenship behaviour increase as commitment levels increase regardless of the levels of conscientiousness.

![Figure 5. Predicted organisational citizenship behaviour levels at different levels of commitment and conscientiousness](image)

**Hypothesis Four**

Hypothesis four predicted that emotional stability moderates the relationship between affective organisational commitment and organisational citizenship behaviour and that the relationship between these two variables is stronger among participants who have high levels of this trait than among participants that have low levels of it. A two block hierarchical multiple regression analysis was conducted to test this hypothesis.
In the first block, standardised affective organisational commitment and emotional stability variables were input. These predictors accounted for a small amount of variance in organisational citizenship behaviour levels ($R^2 = .09$, $F(2, 99) = 6.15$, $p = .003$). Next the interaction term between affective organisational commitment and emotional stability was added to the regression model and this accounted for an increased amount of the variance in levels of organisation citizenship behaviour, ($\Delta R^2 = .05$, $\Delta F(1, 98) = 5.85$, $p = .017$, $\beta = .23$, $t(98) = 2.42$, $p = .017$) thus providing evidence for a moderating effect therefore the null hypothesis is rejected.

Examination of the interaction plot shown in Figure 6 reveals the nature of the moderating effect of emotional stability on the relationship between organisational commitment and organisational citizenship behaviour. It can be seen that when emotional stability is low or medium (equivalent to high and medium neuroticism respectively) this relationship is dampened or buffered. In particular low emotional stability appears to dramatically reduce the impact of increasing commitment on levels of organisational citizenship behaviour whereas high emotional stability enhances it.
Hypothesis Five
Hypothesis five predicted that extraversion does not moderate the relationship between affective organisational commitment and organisational citizenship behaviour. A two block hierarchical multiple regression analysis was conducted to test this hypothesis. In the first block, standardised versions of affective organisational commitment and extraversion were included and accounted for a small amount of variance in organisational citizenship behaviour levels ($R^2 = .06, F(2, 99) = 4.34, p = .016$). In the second block the product term between affective organisational commitment and extraversion was added to model, however this did not significantly improve the ability of the model to predict organisational citizenship behaviour, ($\Delta R^2 = .01, \Delta F(1, 98) = 1.53, p = .219$) therefore the null hypothesis is rejected.

Hypothesis Six
Hypothesis six predicted that intellect/imagination does not moderate the relationship between affective organisational commitment and organisational citizenship behaviour. A two
block hierarchical multiple regression analysis was conducted to test this hypothesis. In the first block, standardised versions of affective organisational commitment and intellect/imagination were included and accounted for a small amount of variance in organisational citizenship behaviour levels ($R^2 = .06$, $F(2, 99) = 4.33$, $p = .016$). In the second block the product term between affective organisational commitment and intellect/imagination was added to model, however this did not significantly improve the ability of the model to predict organisational citizenship behaviour, ($\Delta R^2 = .00$, $\Delta F(1, 98) = .06$, $p = .801$) therefore the null hypothesis is rejected.
Discussion

The principle aim of the present study was to investigate the potential moderating effect of the personality traits commonly referred to as the big five or five factor model (Costa & McCrae, 1992) traits on the relationship between affective organisational commitment (AOC) and organisational citizenship behaviour (OCB). A moderating effect is one in which the relationship between two variables is altered depending on the value of a third variable. In the case of the present study a moderating effect is deemed to have occurred if varying levels of any of agreeableness, conscientiousness, emotional stability, extraversion or intellect/imagination significantly change the nature of the organisational commitment and organisational citizenship behaviour relationship.

The rationale of the study was to help bridge a gap in the literature, as whilst there is research pertaining both to the relationship between AOC and OCB and the relationship between many of the big five traits and OCB, research looking specially at the potential moderator effect of these traits on the AOC-OCB relationship could not be found.

Hypothesis One

Hypothesis one served as the basis for all other hypothesis and proposed there would be a significant positive relationship between affective organisational commitment and organisational citizenship behaviour. Examination of a Pearson’s correlation coefficient revealed that there was indeed a significant, albeit weak, positive relationship between these variables therefore the hypothesis was supported.

The strength of the reported correlation (.28) in the present study was generally in line with previous research. Meyer et al. (2002), in a 22 study (n = 6,277) meta-analysis reported a
correlation of .32 between affective organisational commitment and OCB. In a more recent meta-analysis based on 40 samples (n = 11,416), Ng and Feldman (2011) reported a .23 correlation for the same relationship. Given that both of these studies were meta-analytic in nature and thus had large numbers of total participants, the fact that the correlation reported in the present study was roughly similar lends support to the notion that the measure of OCB used in the present study, the relatively new organisation citizenship behaviour checklist (Fox et al., 2012) has good validity. This can be concluded as the measure used for the commitment side of this relationship already has long established validity (Allen & Meyer, 1996; Allen & Meyer, 2000) and has been used extensively in research (Cohen, 2007).

**Hypothesis Two**

Hypothesis two predicted that agreeableness would moderate the relationship between organisational commitment and organisational citizenship behaviour and increase the strength this relationship as levels of this trait increased. A hierarchal multiple regression analysis found however that agreeableness did not affect the AOC-OCB relation in any significant manner, this hypothesis is therefore rejected.

Aside from understanding of the nature of agreeable people, formation of hypothesis two was also influenced by previous research (Borman et al., 2001; Organ & Ryan, 1995). Organ and Ryan reported that agreeableness was indeed correlated significantly, albeit weakly with both altruism (.13) and general compliance (.11) which together form the two dimensional model of OCB proposed by Smith et al (1983). Although the correlation was weak, this research was a meta-analysis which looked at 55 OCB related samples thus providing strong evidence that
agreeableness can predict OCB. Further meta-analysis support for the link between agreeableness and OCB is provided by Borman et al. who reported an uncorrected correlation of .13 for this relationship. Given the above evidence of a link between agreeableness and OCB, it is an unexpected finding that agreeableness did not act as a moderator and strengthen the relationship between organisational commitment and OCB. Interestingly the correlation between agreeableness and levels OCB directly in the present study was found to be .11, which although not statistically significant, is similar to that reported by both Borman et al. (2001) and Organ and Ryan (1995) which suggests that with further participants the enhancing moderating effect might be found. In the present case however, this result is considered as uninterpretable.

**Hypothesis Three**

Hypothesis three predicted that conscientiousness would act as a moderator of and strengthen the relationship between organisational commitment and citizenship behaviour as levels of it rose. A hierarchical multiple regression analysis however did not find support for this, thus this hypothesis is rejected. Hypothesis formation in this instance was based on the characteristics of those high in conscientiousness as well as substantial meta-analysis based empirical evidence supporting the link between this trait and citizenship behaviour.

A number of authors (Borman et al., 2001; Chiaburu et al., 2011; Organ & Ryan, 1995) have conducted meta-analysis and reported weak but significant correlations between conscientiousness and citizenship behaviour. Both Chiaburu et al. and Organ and Ryan used the full five traits in their studies, while Borman et al. focused on conscientiousness, agreeableness and extraversion. All these authors found that, of all personality traits they examined, conscientiousness was the best predictor of organisational citizenship behaviour. Correlations
reported by Organ and Ryan (1995) for the relationship between conscientiousness and both altruism and general compliance were .22 and .30 respectively, while Borman et al. (2001) reported an uncorrected correlation of .24 between conscientiousness and aggregate OCB.

Similar to these authors the present study found that conscientiousness had the biggest positive correlation with OCB (.12) although this correlation was non-significant and substantially less than the correlations reported in these meta-analysis studies. The correlation reported by the present study is however closer in line with recent research by Lv et al. (2012) who reported five significant correlations between conscientiousness and the five sub constructs of Organ’s (1988) multidimensional model ranging from .13 to .19. Given previous, particularly meta-analysis based research, the finding that conscientiousness does not predict OCB and therefore does not moderate the commitment-OCB relationship in the current sample is unexpected and disappointing. Tempting as it is to put this down to sample size as is more justifiable in the case of agreeableness due to similar correlations, the large discrepancy in reported correlations between the present study and the meta-analysis studies of Borman et al. (2001) and Organ and Ryan (1995) is puzzling and thus this result is uninterpretable.

**Hypothesis Four**

Hypothesis four predicted that emotional stability would moderate and strengthen the relationship between affective organisational commitment and job commitment as levels of it rose, whilst dampening or buffer the relationship as levels of this trait fell. A hierarchical multiple regression analysis found support for this prediction revealing a significant buffering effect when emotional stability is low thus this hypothesis is accepted.
In their meta-analysis based on a sample of 36 studies (n = 8,629), Chiaburu et al. (2011) reported a positive correlation of .12 between emotional stability and aggregate OCB which includes behaviours directed towards both organisations (OCB-O) and individuals (OCB-I) within organisations. Furthermore Kumar et al. (2009), in their study (n = 187) of doctors in a medical college in India reported a negative correlation between neuroticism (low emotional stability) and OCB of -.27. Contrary to both of these findings the present study reported a non-significant and what seems rather counter-initiative negative correlation between emotional stability and levels of OCB of -.16. Therefore taken as a whole, for the present sample, as emotional stability went up, OCB went down, although as mentioned this was a non-significant relationship.

Despite this negative correlation, emotional stability was still found to moderate the commitment-OCB link as parts of the data show markedly different trends from other parts when differentiated by different levels of emotional stability. The hierarchical multiple regression analysis and resulting predicted interaction plot (shown in Figure 5 above) reveal the nature of this moderation and show that when levels of emotional stability are low, increasing commitment is buffered and does not result in the expected amount of increase in OCB. This finding is in line with coverage of emotional stability by Colbert, Mount, Harter, Witt and Barrick (2004) who suggest that those with low levels of emotional stability are often depressed, anxious, fearful or insecure and that this can cause them to withhold effort. These authors posit a number of reasons why this may be case including simply being too tired and being too distracted by the constant rumination associated with depression. An obvious consequence of withheld effort is reduced
performance of many behaviours, including those defined as discretionary citizenship behaviours.

**Hypothesis Five**

Hypothesis five proposed that extraversion would not moderate the relationship between affective organisational commitment and organisational citizenship behaviour. A hierarchical multiple regression analysis revealed no moderating effect and thus this hypothesis is accepted. Formation of this hypothesis was based on research by Chiaburu et al. (2011). In a meta-analysis, these authors reported that, of all the big five personality traits, extraversion was the weakest predictor of aggregate OCB with a correlation of .09, thus it was thought unlikely that extraversion would moderate the organisational commitment-OCB relationship. The correlation for the relationship between extraversion and OCB for the present study was a non-significant .04 and thus was even lower than that reported by Chiaburu et al.

**Hypothesis Six**

Hypothesis six proposed that intellect/imagination would not moderate the relationship between affective organisational commitment and organisational citizenship behaviour. A hierarchical multiple regression analysis revealed no moderating effect and thus this hypothesis is accepted. Since Chiaburu et al. (2011) reported correlations of just .14 for the relationship between intellect/imagination and aggregate OCB and Kumar et al. (2009) indeed found no significant relationship it was felt that this trait was unlikely to moderate the relationship between commitment and OCB. In the present study it was found that intellect/imagination was actually negatively correlated (-.01) with OCB, although this was not a statistically significant finding.
**Strengths and Limitations**

A significant strength of the present study is that it has identified and begun the process of filling a gap in the literature relating to the moderating effect of the big five personality dimensions on the relationship between affective organisational commitment and organisational citizenship behaviour. Additionally since the study reported a correlation between commitment and OCB in line with existing research it is likely to serve as further validation of a relatively new construct measuring organisational citizenship behaviour called the organisational citizenship behaviour checklist proposed by Fox et al. (2012).

The present study has a number of limitations however, not least the sample size (n = 102) which given the requirement to perform multiple regression analysis can be considered quite small. A number of leading meta-analysis studies (Borman et al., 2001; Chiaburu et al., 2011; Organ & Ryan, 1995) have found significant correlations of varying strengths between big five personality dimensions and OCB. In the present study however, only organisational commitment was found to significantly predict OCB and only one of the expected moderated findings was realised with sample size believed to have played a large role in these contrary to evidence findings. An earlier start in the data collection process would have increased the time available to find participants.

Furthermore given that the distribution of the survey was done through uncontrolled environments such as social and business networking sites like Facebook, Twitter and LinkedIn in hindsight it would have been prudent to control for more demographic variables due to the increased chance of potentially confounding variables such as nationality, location and culture being introduced. Evidence that variables such as culture might be relevant and significant to the
current study is provided by Mohamed and Ansia (2012) who contrary to existing research found no correlation between organisational commitment and OCB among employees of a telecoms company in India. These authors suggested that their findings may have gone against previously reported studies due to cultural differences, thus the lack of control for these kind of variables in a study which potentially has international reach via the Internet can be considered a shortcoming.

**Applications and Implications**

It is believed the present research has a number of applications and implications. Firstly, as it has found further evidence suggesting the link between an individual’s level of commitment or emotional attachment to an organisational with that individual’s level of citizenship behaviour it has reinforced the importance to HR managers of the need to foster an environment were high commitment can occur. Secondly, given the nature of the findings related to the moderating effect of emotional stability on the relationship between organisational commitment and citizenship behaviour which shows that low levels of this trait can have a very negative and dampening effect on an individual’s level of commitment, it is suggested this finding has implications which can be feed into personnel selection decisions.

**Future Research**

As a result of the lack of existing studies in the area pertaining to the moderating effect of the big five traits on the commitment-OCB relationship researchers are encouraged to continue this general line of research. Stemming from knowledge about the characteristics of those with low to high levels of the big five traits and the work of Chiaburu et al. (2011), it is suggested that future work analyses the differences in moderating effect of these traits on the commitment-OCB link for the two major subtypes of OCB, those directed towards an organisation (OCB-O) and
those directed towards individuals in an organisation (OCB-I). It is believed differences in moderating effect might exist between OCB-O and OCB-I for many traits. Extraversion for example, being a measure of sociality, is likely to have an impact on levels of citizenship behaviours which are directed towards individuals rather than organisations. Conscientiousness on the other hand, being a measure of dependability, dutifulness and self-discipline is likely to be associated with more impersonal forms of citizenship (Chiaburu et al., 2001) and thus might have more impact on levels of OCB-O.

Additionally, it is suggested that for researchers with access to large samples, consideration be given to controlling for self-report compared to manager reported levels of citizenship behaviour. This suggestion is in light of findings by Organ and Ryan (1995) who after controlling for the effect of possible subjective bias in self-report measures reported that correlations between many antecedents of OCB dropped when these measures were excluded. Similar findings were reported by Meyer et al. (2002).

**Conclusion**

While in line with expectations, the present study did report a significant positive correlation between affective organisational commitment and organisational citizenship behaviour, it is disappointing that only one of three proposed moderating effect hypotheses were accepted. Out of the three traits of agreeableness, conscientiousness and emotional stability, only emotional stability was found to significantly moderate the relationship between commitment and citizenship behaviour. Finally, results did support two hypothesis which predicted no moderating effect for both extraversion and imagination/intellect. It is hoped this study can act as a catalyst for further research in this area.
References


Fox, S., Spector, P. E., Goh, A., Bruursema, K., & Kessler, S. R. (2012). The deviant citizen: Measuring potential positive relations between counterproductive work behaviour and


Appendix 1 - Information Sheet and Informed Consent

Welcome.

My name is David and I am a final year psychology student in Dublin Business School and am conducting research that explores the impact of personality on the relationship between two workplace variables, namely organisational commitment and organisational citizenship behaviour. Organisational commitment refers to an individual’s emotional attachment towards an organisation. Organisational citizenship behaviour on the other hand refers to behaviour that is discretionary, not directly or explicitly recognized by any formal reward system, and that in the aggregate promotes the effective functioning of an organisation. This research is being conducted as part of my studies and will be submitted for examination. I invite you to partake in this research by completing this online survey.

What will the survey involve?
The survey will involve you answering a number of multiple choice questions which aim to collect data about your levels of certain personality characteristics, organisational commitment and organisational citizenship behaviour. You will have to answer all of the questions in the survey and it is expected to take between 10 and 15 minutes to complete. The bar at the bottom of the page indicates your progress.

Do I have to take part and is the survey anonymous?
No, participation is completely voluntary and so you are not obliged to take part. All information
collected is anonymous and confidential as only basic demographic information is requested. Thus responses cannot be attributed to any one participant. For this reason, it will not be possible to withdraw your participation after the questionnaire has been submitted. You may however withdraw your participation at any time up to the point of submission by simply discarding and exiting this online survey. A withdrawal and exit link is provided in the top right hand corner.

Contact Information

If you need any further information or have any concerns about this survey, you can contact me:

David Callan, [redacted] or my supervisor, [redacted]

By clicking 'Next' and beginning the survey, you acknowledge that you have read this information, are aged 18 or over and that you give your informed consent to participate in this research.
Appendix 2 - Demographic Questions

What is your Gender?

Female
Male

What is your Age?

18 - 24
25 – 34
35 – 44
45 – 54
55 – 64
65 – 74
75 or older
Appendix 3 - Personality Survey

Indicate for each statement whether it is Very Inaccurate, Moderately Inaccurate, Neither Accurate Nor Inaccurate, Moderately Accurate, or Very Accurate as a current description of you.

<table>
<thead>
<tr>
<th></th>
<th>Very Inaccurate</th>
<th>Moderately Inaccurate</th>
<th>Neither Accurate Nor Inaccurate</th>
<th>Moderately Accurate</th>
<th>Very Accurate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Am the life of the party.</td>
<td>O O O O O O O (1+)</td>
<td></td>
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<tr>
<td>2. Feel little concern for others.</td>
<td>O O O O O O O (2-)</td>
<td></td>
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<tr>
<td>3. Am always prepared.</td>
<td>O O O O O O O (3+)</td>
<td></td>
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<tr>
<td>4. Get stressed out easily.</td>
<td>O O O O O O O (4-)</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>5. Have a rich vocabulary.</td>
<td>O O O O O O O (5+)</td>
<td></td>
<td></td>
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<tr>
<td>6. Don't talk a lot.</td>
<td>O O O O O O O (1-)</td>
<td></td>
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<tr>
<td>7. Am interested in people.</td>
<td>O O O O O O O (2+)</td>
<td></td>
<td></td>
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<tr>
<td>8. Leave my belongings</td>
<td>O O O O O O O (3-)</td>
<td></td>
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</tr>
</tbody>
</table>
around.

9. Am relaxed most of the time. O O O O O O (4+)

10. Have difficulty understanding abstract ideas. O O O O O O (5-)

11. Feel comfortable around people. O O O O O O (1+)

12. Insult people. O O O O O O (2-)

13. Pay attention to details. O O O O O O (3+)

14. Worry about things. O O O O O O (4-)

15. Have a vivid imagination. O O O O O O (5+)

16. Keep in the background. O O O O O O (1-)

17. Sympathize with others' feelings. O O O O O O (2+)

18. Make a mess of things. O O O O O O (3-)

19. Seldom feel blue. O O O O O O (4+)

20. Am not interested in O O O O O O (5-)

abstract ideas.

<p>| | | | | | | | |</p>
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</tr>
</thead>
<tbody>
<tr>
<td>21.</td>
<td>Start conversations.</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>22.</td>
<td>Am not interested in other people's problems.</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>23.</td>
<td>Get chores done right away.</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>25.</td>
<td>Have excellent ideas.</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>26.</td>
<td>Have little to say.</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>27.</td>
<td>Have a soft heart.</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>28.</td>
<td>Often forget to put things back in their proper place.</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>29.</td>
<td>Get upset easily.</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>30.</td>
<td>Do not have a good imagination.</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>31.</td>
<td>Talk to a lot of different people at parties.</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>32.</td>
<td>Am not really</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
</tbody>
</table>
interested in others.

33. Like order. O O O O O O (3+)

34. Change my mood a lot. O O O O O O (4+)

35. Am quick to understand things. O O O O O O (5+)

36. Don't like to draw attention to myself. O O O O O O (1+)

37. Take time out for others. O O O O O O (2+)

38. Shirk my duties. O O O O O O (3+)

39. Have frequent mood swings. O O O O O O (4+)

40. Use difficult words. O O O O O O (5+)

41. Don't mind being the center of attention. O O O O O O (1+)

42. Feel others' emotions. O O O O O O (2+)

43. Follow a schedule. O O O O O O (3+)

44. Get irritated easily. O O O O O O (4+)

45. Spend time reflecting on things. O O O O O O (5+)
<table>
<thead>
<tr>
<th></th>
<th>Statement</th>
<th>Scale</th>
</tr>
</thead>
<tbody>
<tr>
<td>46.</td>
<td>Am quiet around strangers.</td>
<td>O</td>
</tr>
<tr>
<td>47.</td>
<td>Make people feel at ease.</td>
<td>O</td>
</tr>
<tr>
<td>48.</td>
<td>Am exacting in my work.</td>
<td>O</td>
</tr>
<tr>
<td>49.</td>
<td>Often feel blue.</td>
<td>O</td>
</tr>
<tr>
<td>50.</td>
<td>Am full of ideas.</td>
<td>O</td>
</tr>
</tbody>
</table>
Appendix 4 - Affective Organisational Commitment Survey

Listed below is a series of statements that represent feelings that individuals might have about the company or organisation for which they work. With respect to your own feelings about the particular organisation for which you are now working, please indicate the degree of your agreement or disagreement with each statement by selecting an answer from 'strongly disagree' to 'strongly agree'.

1 = strongly disagree

2 = disagree

3 = slightly disagree

4 = undecided

5 = slightly agree

6 = agree

7 = strongly agree

1. I would be very happy to spend the rest of my career with this organisation.

2. I really feel as if this organisation's problems are my own.

3. I do not feel a strong sense of "belonging" to my organisation. (R)

4. I do not feel "emotionally attached" to this organisation. (R)

5. I do not feel like "part of the family" at my organisation. (R)

6. This organisation has a great deal of personal meaning for me.
Appendix 5 - Organisational Citizenship Behaviour Survey

How often have you each of the following things on your present job?

1 = Never
2 = Once or twice
3 = Once or twice per month
4 = Once or twice per week
5 = Every day

1. Picked up meal for others at work
2. Took time to advise, coach, or mentor a co-worker.
3. Helped co-worker learn new skills or shared job knowledge.
4. Helped new employees get oriented to the job.
5. Lent a compassionate ear when someone had a work problem.
6. Lent a compassionate ear when someone had a personal problem.
7. Changed vacation schedule, work days, or shifts to accommodate co-worker’s needs.
8. Offered suggestions to improve how work is done.
9. Offered suggestions for improving the work environment.
10. Finished something for co-worker who had to leave early.
11. Helped a less capable co-worker lift a heavy box or other object.
12. Helped a co-worker who had too much to do.
13. Volunteered for extra work assignments.
14. Took phone messages for absent or busy co-worker.

15. Said good things about your employer in front of others.

16. Gave up meal and other breaks to complete work.

17. Volunteered to help a co-worker deal with a difficult customer, vendor, or co-worker.

18. Went out of the way to give co-worker encouragement or express appreciation.

19. Decorated, straightened up, or otherwise beautified common work space.

20. Defended a co-worker who was being "put-down" or spoken ill of by other co-workers or supervisor.