SOCIAL COMPARISONS AND ORGANIZATIONAL CITIZENSHIP BEHAVIOURS: A DAILY DIARY STUDY

Drawing upon self-consistency and affective events theories, we test a model that social comparisons have motivational and affective consequences that lead to organizational citizenship behaviours (OCB). Data collected from a diary study are consistent with our hypotheses that social comparisons are linked to OCB through both motivational and affective channels.

Organizational citizenship behaviours (OCBs), or extra-role behaviours not formally required by organizations which serve to benefit the organization and its members (Organ, 1988; Van Dyne, Cummings, & McLean Parks, 1995), remain a central concern for organizational researchers (Podsakoff, MacKenzie, Paine, & Bacharach, 2000). Such interest is hardly astonishing, given that OCBs are inexorably linked to organizational performance and profitability (Podsakoff & MacKenzie, 1997) and are considered to be one of the three main components of individual job performance (Rotundo & Sackett, 2002). To date, much of the OCB literature has sought to document the attitudinal, task, organizational, and leadership factors which drive OCBs (Organ & Ryan, 1995; Podsakoff et al., 2000). Despite the significant gains in knowledge that have resulted, OCB research has been characterized as stale, particularly in terms of untangling the motivational basis of OCB (Zellers & Tepper, 2003). Reviews have decried the failure of prior OCB research to integrate alternative motivational and affective frameworks which could both advance our understanding of the construct and reinvigorate the field (Zellers & Tepper, 2003). As an initial step towards addressing these criticisms, in the current paper we attempt to situate the OCB construct within a novel theoretical framework, one which considers both motivational and affective influences on OCBs: social comparisons.

Social comparisons, which refer to the “process of thinking about information about one or more other people in relation to the self” (Wood, 1996, p. 520), are universal social phenomenon which pervades nearly all aspects of human social interactions (Brickman & Bulman, 1977). Studies have demonstrated that these vertical social comparisons are powerful antecedents of individuals’ affect, attitudes, and behaviours (Brown, Ferris, Heller, & Keeping, 2007; Buunk & Gibbons, 2007; Suls & Wheeler, 2000). Yet despite the fact that directional social comparisons are commonplace for employees and exert considerable sway over their workplace behaviour, there has been a dearth of organizational scholarship on the topic (Greenberg, Ashton-James, & Ashkanasy, 2007).
In the present study, we sought to test whether the daily occurrence of upward and downward social comparisons relate to daily citizenship behaviours. The theoretical basis of our hypotheses draws on the motivational and affective consequences associated with social comparisons (Wills, 1981; Wood, 1996); in so doing, our study advances work in the OCB domain by empirically demonstrating the utility of integrating new research paradigms with the OCB field. Below, we begin by reviewing the concept of directional social comparisons. Subsequently we review the motivational consequences of social comparisons, and introduce belief in a just world as a possible moderator variable of social comparison’s direct effects on citizenship behaviours. Finally, we position social comparisons as affect-inducing events within an affective events theory (AET; Weiss & Cropanzano, 1996) framework and propose positive affect as a mediator of the effects of social comparison on citizenship behaviours. Our hypotheses are subsequently tested using a daily diary study design.

**Upward and Downward Social Comparisons**

Pioneered by Leon Festinger (1954) over 50 years ago, the topic of social comparisons remains among the most fertile topics in psychology today. As originally formulated in social comparison theory, humans possess a fundamental drive to evaluate their opinions and abilities and, in the absence of objective physical standards, are motivated to evaluate themselves against similar others (Festinger, 1954). This drive is theorized to be biologically rooted and evolutionarily adaptive insofar as it allows the individual to size up his/her group status and prevents excessive specialization and competition within groups (Buunk & Mussweiler, 2001). In essence, social comparison theory posits that social comparisons allow individuals to generate stable and accurate self-evaluations of their relative position within groups and that this knowledge assists the individual in successfully navigating the social environment.

Social comparison theory (Festinger, 1954) originally proposed a unidirectional upward drive in which social comparisons serve a self-improvement motive whereby the individual looks to others for inspiration and self-improvement (Collins, 1996; Lockwood & Kunda, 1997). In other words, a basic assumption of Festinger’s initial conceptualization of social comparisons was that individuals will be driven to compare upwards against superior others. However, subsequent researchers have demonstrated that while individuals compare upwards, they also compare downwards against inferior others. Brickman and Bulman (1977) convincingly argued that although comparisons with those doing better are extremely informative, they can also be highly threatening to the individual. For this reason, oftentimes individuals will engage in downward comparisons with others who are worse off as a method of gathering non-threatening information about the self (Wills, 1981).

Research on social comparisons has supported the existence of upward and downward comparisons, showing that individuals compare themselves with others every day and that the majority of all social comparisons are either upwards or downwards (Olson & Evans, 1999; Wheeler & Miyake, 1992). Although the frequency of upward and downward social comparisons are positively related (Buunk, Zurriaga, Gonzalez-Roma, & Subirats, 2003), the two types of comparisons are distinct; moreover, each have unique implications for individuals’ behaviours, attitudes, and well-being.

**Self-Consistency Theory**

Self-consistency theory was developed by Korman (1970, 1976) in an attempt to integrate cognitive consistency and balance theories within organizational psychology (e.g., Festinger, 1954; Heider, 1958). In particular, self-consistency theory states that individuals will engage in behaviours that are consistent with their self-perceptions in order to maintain a sense of cognitive balance: individuals who have positive views of themselves engage (or refrain from engaging) in behaviours designed to
maintain this perception, while individuals who have negative views of themselves similarly engage (or refrain from engaging) in behaviours designed to maintain this perception. Empirically, researchers have used self-consistency theory as a framework to suggest individuals with positive self-perceptions are motivated to engage in behaviours beneficial to the organization (i.e., citizenship behaviours; Pierce, Gardner, Cummings, & Dunham, 1989). In particular, such behaviours reinforce positive self-perceptions in that they are demonstrations of competence and evidence that one is a “good corporate citizen.” On the other hand, individuals with negative self-perceptions are motivated to refrain from engaging in such behaviours, in that they are not consistent with negative perceptions of the self.

Given self-perceptions provide a motivational basis to engage in behaviour, where one derives one’s self-perceptions becomes a question of interest. As noted by Festinger (1954), one manner in which people obtain information about themselves is through social comparison processes. Indeed, a wealth of evidence has demonstrated that social comparisons influence individuals’ opinions of themselves (see, e.g., Morse & Gergen, 1970; Tesser, Millar, & Moore, 1988; Wills, 1981). Given the self-referent information contained within social comparisons, it stands to reason that one consequence of social comparisons is that comparisons should motivate an individual to act in a manner consistent with the self-perceptions such comparisons engender. That is, if a social comparison suggests one is inadequate or otherwise inferior to others (as with an upward comparison) or that one is better off or otherwise superior to others (as with a downward comparison), according to self-consistency theory, individuals will be motivated to either engage in, or refrain from engaging in, positive behaviours such as organizational citizenship behaviours. Based on the above, we predict the following:

**Hypothesis 1:** Upward social comparisons will be negatively related to organizational citizenship behaviours.

**Hypothesis 2:** Downward social comparisons will be positively related to organizational citizenship behaviours.

**Belief in a Just World: A Boundary Condition on Self-Consistency Motivation**

While self-consistency theory provides a rationale for why individuals may be motivated to engage in citizenship behaviours following social comparisons, it should be noted that such motivation should not be equally powerful for all individuals. In particular, we suggest that individual differences in the motivation to engage in self-consistent behaviours can be assessed by the extent to which an individual believes that one’s life outcomes are tied to their personal status.

Just-world theory states that people have a fundamental need to believe that the world is a fair and orderly place where people get what they deserve (Lerner, 1978, 1980). Although the need to believe that the world is a just place is thought to be a universal human need (Lerner, 1980), research has illustrated that the magnitude of this belief differs across individuals (e.g., Dalbert, 1999; Lipkus, 1991). Differences in the strength of this belief have been associated with differences in behaviours and cognitions (see Hafer & Begue, 2005 for review). A well-documented consequence of having a strong belief that the world is a just place is the derogation of innocent victims (Hafer & Begue, 2005). This effect is said to occur because people interpret information as being consistent with their beliefs (i.e., “if something bad happens to someone they must have deserved it”; Lerner & Miller, 1978).

In the context of the current study, a corollary of people holding different beliefs about the fairness of the world is that the information one perceives from social comparisons is likely to be more or less impactful as a function of this belief. To illustrate, for individuals who do not believe the world is just, seeing that one is better or worse off than others should provide no information regarding one’s positive or negative self-image (i.e., “if people do not necessarily get what they deserve, the fact that I am...
better off than others does not provide any information about my character”). Conversely, for those who believe the world is just, perceiving that one is better or worse off than others is likely to be evaluated as indicating actual merit and worth (i.e., “if people get what they deserve, and I perceive that I am better off than others it must mean that I am a better person”).

Consequently, and contrary to what we outlined above, social comparisons should not always activate self-consistency motivational processes. In particular, for individuals who view the world as being characterized by randomness, the information derived from social comparisons should not engender self-consistent behaviours, as this information has no bearing on whether they are good or bad individuals. However, for individuals who believe the world is best characterized as one where good (or bad) things happen to good (or bad) people, information gleaned from social comparisons speak directly to an individual's self-perceptions and, consequently, should activate the motivation to be self-consistent. In other words, we expect belief in a just world to moderate whether or not individuals engage in self-consistent behaviours following social comparisons. More formally, we hypothesize the following:

Hypothesis 3: Belief in a just world will moderate the effects of upward and downward social comparisons on OCB, such that the relation between social comparisons and citizenship behaviours will be stronger for those who believe the world is just.

Social Comparisons and Positive Affect

In addition to having motivational implications, social comparisons can have affective consequences as well (e.g., Buunk & Gibbons, 2007). Specifically, social comparisons have been found to produce different combinations of affect depending on whether the comparison results in a contrast (e.g., “that person is not me”) or an assimilation effect (e.g., “that person could be me”; Collins, 1996; Pelham & Wachsmuth, 1995; Smith 2000). In general, contrast effects produce negative reactions to upward comparisons and positive reactions to downward comparisons. Negative reactions to upward comparisons occur because the comparison identifies a discrepancy that makes the self appear less favourable (Buunk et al. 2003; Lyubonirsky & Ross, 1997). On the other hand, contrast effects engender positive reactions to downward comparisons because they make the self appear more favourable by distancing the self from those who are worse off (Mussweiler & Strack, 2000, Moore, 2007; Smith, 2000). In the case of assimilation effects, the opposite holds. Upward comparisons result in positive reactions and downward comparisons engender negative reactions. This is purported because upward comparisons -- that result in assimilation effects -- induce positive feelings because the comparison can be inspiring and motivational (Collins, 1996; Lockwood & Kunda, 1997), whereas downward comparisons result in negative reactions because they engenders thoughts that one could end up like the target (Buunk et al. 2005; Mussweiler & Strack, 2000).

In order to reconcile the conflicting research findings pertaining to the affective consequences of social comparisons, one can use the context to predict whether assimilation or contrast effects are likely to occur. Specifically, it has been found that environments that promote competition facilitate the occurrence of contrast effects whereas environments that promote cooperation are more inclined to produce assimilation effects (Beach & Tesser, 2000; Stapel & Koomen, 2005). Because we are interested in the effects of social comparisons at work, and work contexts have been found to activate competitive mind sets (Kay, Wheeler, Bargh, & Ross, 2004) we predict that participants’ affective reactions to social comparisons will be consistent with contrast effects (i.e., negative reactions to upward comparisons and positive reactions from downward comparisons). As such, we hypothesize:

Hypothesis 4: Upward comparisons will have a negative relation with positive affect, such that the upward comparisons will be associated with lower levels of positive affect.
Hypothesis 5: Downward comparisons will have a positive relation with positive affect, such that downward comparisons will be associated with higher positive affect.

Affective Events Theory

As noted by Greenberg et al. (2007), because directional social comparisons are closely intertwined with affective reactions, affective events theory (AET) holds particular promise for understanding how directional social comparisons influence relevant organizational behaviour. According to AET, emotions are not random and disorganized, but instead are predictable and can serve to organize and guide behaviour (Weiss & Cropanzano, 1996). Specifically, AET argues that emotions occur in response to workplace events and that these emotions determine behaviour (Weiss & Cropanzano, 1996). Emotions are argued to be a strong predictor of behaviour because they are conscious, intense, and specific, causing them to preoccupy the individual and direct behaviour (Frijida, 1993; Weiss & Cropanzano, 1996).

Previous research has documented several benefits of positive emotions with studies showing that positive mood is linked to decreased aggressiveness, withdrawal, more favourable evaluations of individuals and broader cognitions (Frederickson, 2001; Isen & Baron, 1991; Pelled & Xin, 1999). Specific to the prediction of OCB, affect (particularly positive affective states) has been empirically established as an antecedent (e.g., George & Brief, 1992; Ilies, Scott, & Judge, 2006; Lee & Allen, 2002).

Hypothesis 6: Participants’ daily positive affect will be positively related daily OCB.

In accordance with AET, we expect that positive affect will be a consequence of social comparisons and, in turn, predict OCB. Social comparisons fit within AET’s conception of emotion generating events. Weiss and Cropanzano (1996) identify an event as “a change in circumstances, a change in what one is currently experiencing” (p. 31). Social comparisons, by definition, result in a change in one’s current circumstance as comparisons can reveal self-relevant information that alters the comparer’s perceptions of his or her current circumstance (e.g., Wood, 1989). Consequently, we expect that social comparisons will have an indirect on OCB through positive affect.

Hypothesis 7: Positive affect will mediate the effects of upward and downward social comparisons on OCB.

To summarize, the current study is an examination of the impact of daily social comparisons on OCB. Drawing from self-consistency theory, just-world theory, and AET, we propose that social comparisons will lead to OCB by generating motivational as well as affective consequences for employees. To investigate our hypotheses, we employed a diary study design, which effectively enables us to capture the dynamic relations between these variables. This is a necessary design feature because the key variables of interest are not enduring and stable, but instead are episodic in nature (i.e., cognitive events, affective reactions, and discrete behaviours). Moreover, taking measurements on a daily basis has the added advantage of occurring in real-time and not being reliant in participants’ recall.

Method

Participants

Ninety-nine (65% female) full-time employees from a diverse set of occupations (e.g., consultant, office clerk, graphic designer, systems analyst, operations manager) were recruited to participate in the present study. Participants were employed in a wide variety of industries including business and finance
(13%), technology (13%), healthcare (13%), education (10%), and engineering/architecture (6%). The mean age of participants was 32.07 years ($SD = 8.10$) and the average hours worked per week was 42 ($SD = 6.20$). Participants reported being employed in their current organization an average of 4.8 years ($SD = 6.98$), having worked in their present position for 2.78 years ($SD = 4.00$), and with their current supervisor for 2.31 years ($SD = 2.18$).

**Procedure**

Potential participants were recruited using recruitment posters, placed in commuter areas (e.g. bus shelters), newspapers, and other public places (e.g. coffee shops). The advertisement provided information regarding the researchers’ university affiliation and indicated that the researchers were seeking interested employed individuals to participate in an investigation of workplace attitudes and behaviour. The recruitment poster also indicated that the study had received ethics approval from the university’s ethics board, involved the completion of 14 daily surveys, and indicated that eligible participants could earn $28 dollars in compensation for their participation. Finally, the poster directed interested individuals to complete an online pre-screen inventory. Potential participants were not informed as to the nature of the selection criteria.

Overall, 124 individuals completed the pre-screen inventory which included numerous demographic questions (e.g., industry, gender) as well as a question regarding how frequently they interacted with their supervisors and co-workers. To ensure that participants had sufficient opportunity to engage in daily OCB, only full-time employees (defined as working a minimum of 35 hours per week) who indicated that they frequently interacted with their co-workers and supervisors on a daily basis were invited to participate. All 124 individuals qualified for the study and were subsequently invited to participate in the focal investigation; 99 individuals subsequently participated (79% response rate). Each of these individuals was sent an e-mail with a unique identifier code and a link to a short one-time trait measure survey (e.g., belief in a just world). In addition to completing the trait measure survey, participants also provided the researchers with a 14 day period of time in which they had no scheduled absences from work (i.e., vacation) and would be free to complete the diary portion of the study. Approximately 2 weeks later participants began completing the daily diaries.

An interval-contingent experience sampling methodology (Nezlek, 2001) was used in the daily diary phase of the research, such that participants completed a daily questionnaire at fixed intervals, in this case at the end of each workday. To ensure the proper timing of the daily surveys, participants were emailed a link to the daily questionnaires towards the end of their workday. As an additional check the time at which each survey was completed was examined to ensure that the surveys were completed on the appropriate day. All participants began their daily diaries on a Monday. The daily questionnaires contained measures of social comparisons, affect, and organizational citizenship behaviours. If every participant had completed every daily questionnaire across the 14 days it would have resulted in 1386 data points (99 x 14). Because some participants did not complete every daily questionnaire we obtained 1076 data points, resulting in an overall response rate of 78% across time and participants (1076/1386). At the completion of data collection participants were compensated $28 dollars and were provided with feedback as to the purpose of the study.

**Measures**

**Daily organizational citizenship behaviours.** We measured daily OCB using a 14-item scale adapted from Lee and Allen (2002). The original scale was slightly altered to measure behaviour at the daily level. Specifically, participants were asked to indicate if they had performed the behaviours listed on the measure “at work today” using a yes/no response scale. Responses were summed to generate a daily OCB count score for each participant. Given that count data have the characteristic of being bounded at
zero and are likely to be positively skewed we transformed the data using a square root transformation prior to conducting our analyses (Cohen, Cohen, West, & Aiken, 2003). Sample items included, “willingly gave your time to help others who had work-related problems”, and “assisted others with their duties”.

**Daily social comparisons.** The daily frequency with which participants engaged in upward and downward social comparisons was assessed using two 5-item scales adapted from prior social comparison research (Brown et al., 2007; Buunk et al., 2003; Goodman, 1977; Michinov, 2005). Participants were asked to indicate the frequency with which they compared themselves to others who were better off and worse off in terms of salary, benefits, career progression, working conditions, and performance. The stems specifically read, “Today I compared myself to others who are better off than me at work in terms of…” and “Today I compared myself to others who are worse off than me at work in terms of…” For each scale, participants recorded their responses separately for each dimension (e.g., salary, benefits, career progression, etc.) along a 10-point frequency scale (0 = “0 times” to 10 = “10 times or more”). Responses were summed separately for the downward and upward social comparison scales to generate a count score for each form of social comparison. As with responses on the OCB scale, responses to these scales were transformed using a square root transformation (Cohen et al., 2003).

**Daily positive affect.** Positive affect was measured using the positive affect scale from the positive and negative affect schedule (Watson, Clark, & Tellegen, 1988). The positive affect subscale consists of ten items (e.g., proud, strong). Participants were instructed to indicate how they felt at work that day on a 5-point scale (1 = strongly disagree and 5 = strongly agree).

**Belief in a just world.** Participants’ belief in a just world was assessed using a 7-items scale developed by Dalbert (1999). Responses were given on a 7-point Likert scale ranging from 1 = strongly disagree to 7 = strongly agree. Sample items include, “Overall, events in my life are just” and “I believe that, by and large, I deserve what happens to me”.

**Analyses**

Given the multilevel nature of our data we tested our hypothesized relationships using multilevel regression. To do so we used Hierarchical Linear Modeling software (HLM 6.0: Raudenbush, Bryk, Cheong & Condon, 2004). HLM allowed us to examine both intra-individual effects, referred to as Level 1, and the inter-individual effects, referred to as Level 2. The Level 1 variables are the daily measures of social comparisons, positive affect, and OCB, and the Level 2 variable consists of participants’ belief in a just world.

To ensure that our Level 1 parameter estimates were not biased by individual differences, we centered all Level 1 predictors at each individual’s mean (group-mean centering) prior to conducting our analyses. Centering at the person (group) level removes between-person (Level 2) variance from the Level 1 estimates resulting in cleaner Level 1 estimates (Enders & Tofghi, 2007; Raudenbush & Bryk, 2002). Moreover, group-mean centering provides more accurate estimates of slope variances, making it more accurate in detecting slope heterogeneity across individuals (Raudenbush & Bryk, 2002). In addition, to aid in the interpretation of the Level 2 coefficients, all Level 2 predictors were grand-mean centered prior to running our analyses. The logic of doing so is similar to that of OLS regression: because BJW does not have a meaningful zero point, centering at the mean provides an interpretable intercept (Enders & Tofghi, 2007).

Because our data is longitudinal in nature we utilized the hierarchical multivariate linear modeling (HMLM) option within the HLM software. HMLM was selected because it allowed us to model alternative error structures at Level 1. The ability to model alternative error structures is essential in
longitudinal designs because time can create dependency in data that is not due to the grouping variable. Specifically, there is a natural ordering to the data (i.e., Time-1 is closer to Time-3 than it is to Time-10; Bliese & Ployhart, 2002). The underlying sequential nature of the data makes it inappropriate to assume that errors from the repeated measures variables (i.e., Level 1 variables) are independent and homogeneous as the ordering of the data can create dependency (i.e., measures that are closer in time can be more strongly related to each other than measures that are far apart) and heteroscedasticity (i.e., the variance of errors may change across time, becoming either larger or smaller; Bliese & Ployhart, 2002). If not taken into account, correlated errors and heteroscedasticity of errors can alter standard errors, which can in turn bias significance tests (Bliese & Ployhart, 2002; Bryk & Raudenbush, 2002).

To address potential complexities in the Level 1 error structure, we tested the fit of several different error structures: (a) homogeneous (i.e., errors are homogeneous and independent), (b) heterogeneous (i.e., error variances change across time), (c) correlated (autoregressive; i.e., errors are correlated across time), and (d) unrestricted (i.e., no restrictions are placed on error variances or correlations). In each model we tested, the unrestricted model demonstrated the best model fit, a finding that corresponds with other recent diary studies (see Livingston & Judge, 2007). Consequently, all the results subsequently reported are derived from models in which the Level 1 error structure was unrestricted.

### Results

#### Partitioning Variance Components

Prior to testing our hypotheses we estimated the systematic within- and between-person variance in each of our daily measures in order to assess whether there was sufficient within-person (daily) variance to proceed with hypothesis testing. To partition the variance into within- and between-person components, a null model (a model in which no predictors were entered at either level of analysis) was run on each of our four Level 1 variables. As shown in Table 1, the results indicate that between 34% and 44% of the variance (far right column) in our variables was attributable to within-person variability, making it appropriate to proceed with a multilevel analysis.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Intercept ($\gamma_{00}$)</th>
<th>Within-person variance ($\sigma^2$)</th>
<th>Between-person variance ($\tau_{00}$)</th>
<th>Percent of within-person variance $^b$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Positive affect</td>
<td>2.90**</td>
<td>0.38</td>
<td>0.80</td>
<td>34</td>
</tr>
<tr>
<td>Daily OCB</td>
<td>2.40**</td>
<td>0.45</td>
<td>0.60</td>
<td>43</td>
</tr>
<tr>
<td>Upward Social Comparison</td>
<td>1.16**</td>
<td>0.74</td>
<td>1.27</td>
<td>37</td>
</tr>
<tr>
<td>Downward Social Comparison</td>
<td>0.79**</td>
<td>0.62</td>
<td>0.78</td>
<td>44</td>
</tr>
</tbody>
</table>

$^a\gamma_{00}$ = average intercept across participants which equates to the average level of the dependent variable in our sample; $^b$ Percent of within-person variance was as computed as $\sigma^2/(\sigma^2 + \tau_{00})$. OCB = Organizational Citizenship Behaviours. ** $p < .001$.

$^1$ In HMLM the fit of these four alternative error structures can be evaluated using a likelihood-ratio test (Raudenbush, Bryk, & Congdon, 2000).
Hypothesis Testing

Hypothesis 1 predicted that upward social comparisons would be negatively related to daily OCB, and Hypothesis 2 predicted that downward social comparisons would be positively related to daily OCBs. Moreover, Hypothesis 3 predicted that participants’ just world beliefs would moderate these relations, such that they would be stronger at high levels of BJW. To test these hypotheses daily OCB was regressed on daily upward and downward social comparisons and BJW was entered as a Level 2 predictor of daily OCB and of the two Level 1 relations, creating two cross-level interactions. The results from this model, presented in Table 2, do not reveal support for Hypothesis 1, but indicate support for Hypotheses 2 and 3. Hypothesis 1 was not supported because upward comparisons were not negatively related to daily OCB (γ20 = -0.002, ns). However, downward comparisons were significantly positively related to daily OCB (γ10 = 0.05, p < 0.05), as predicted by Hypothesis 2, and BJW significantly moderated the effects of upward (γ21 = -0.06, p < 0.05) and downward (γ11 = 0.07, p < 0.05) comparisons, as predicted by Hypothesis 3.

Table 2

Hierarchical Multivariate Linear Modeling Results for Social Comparisons and Belief in a Just World Predicting Daily OCB

<table>
<thead>
<tr>
<th>Independent Variables</th>
<th>Unstandardized Coefficients</th>
<th>Standard Error</th>
<th>t</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept, γ00</td>
<td>2.60**</td>
<td>0.06</td>
<td>46.10</td>
</tr>
<tr>
<td>BJW, γ01</td>
<td>0.18*</td>
<td>0.06</td>
<td>3.15</td>
</tr>
<tr>
<td>Downward Comparison, γ10</td>
<td>0.05*</td>
<td>0.02</td>
<td>2.10</td>
</tr>
<tr>
<td>BJW, γ11</td>
<td>0.07*</td>
<td>0.03</td>
<td>2.60</td>
</tr>
<tr>
<td>Upward Comparison, γ20</td>
<td>-0.002</td>
<td>0.02</td>
<td>-0.1</td>
</tr>
<tr>
<td>BJW, γ21</td>
<td>-0.06*</td>
<td>0.02</td>
<td>-2.90</td>
</tr>
</tbody>
</table>

Note. * p < 0.05. ** p < 0.001.

Visual inspection of the interactions indicates that their patterns are consistent with our expectations. Specifically, the interaction presented in Figure 1 depicts the interaction between upward comparisons and BJW and reveals that the effect of upward social comparisons on daily OCB is more negative at high levels of BJW than it is at low levels (where it appears to be positive). Figure 2, depicts the interaction between BJW and downward comparisons and illustrates that there is a stronger positive relation between downward comparisons and daily OCB at high levels of BJW compared to low levels. The values for “high” were plotted at one standard deviation above the mean and the values for “low” were plotted at one standard deviation below the mean (Cohen et al., 2003).

Mediation Analysis: The Role of Positive Affect

In addition to investigating the direct effect of social comparisons on OCB, we were also interested in investigating the role of positive affect. We first examined if social comparisons were related to positive affect. We predicted that upward comparisons would be negatively related to positive affect (H4) and that downward comparisons would be positively related to positive affect (H5). To test these hypotheses we regressed positive affect on upward and downward comparisons simultaneously. Results of this analysis, presented in Table 3, provide support for Hypotheses 4 and 5 as upward comparisons are negatively related with positive affect (γ20 = -0.06, p < 0.05) and downward comparisons are positively related to positive affect (γ10 = 0.09, p < 0.001). We then tested if positive affect was positively related
with daily OCB (H6) and whether social comparisons have an indirect effect on daily OCB through positive affect (H7). To test these hypotheses we ran a full model with upward comparisons, downward comparisons, and PA simultaneously predicting daily OCB. The results of this analysis, presented in Table 4, indicate that PA is a significant predictor of OCBs when controlling for the effect of social comparisons ($\gamma_{30} = 0.21, p < 0.001$) supporting Hypothesis 6.

**Figure 1**

Cross-level interaction between upward social comparisons and belief in a just world predicting daily OCB

![Figure 1](image1.png)

**Figure 2**

Cross-level interaction between downward social comparisons and belief in a just world predicting daily OCB

![Figure 2](image2.png)
Table 3
Hierarchical Multivariate Linear Modeling Results for Social Comparisons Predicting Positive Affect

<table>
<thead>
<tr>
<th>Variables</th>
<th>Unstandardized Coefficients</th>
<th>Standard Error</th>
<th>t</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept, $\gamma_{00}$</td>
<td>3.10**</td>
<td>.08</td>
<td>38.14</td>
</tr>
<tr>
<td>Downward Comparison, $\gamma_{10}$</td>
<td>0.09**</td>
<td>.02</td>
<td>4.35</td>
</tr>
<tr>
<td>Upward Comparison, $\gamma_{20}$</td>
<td>-0.06**</td>
<td>.02</td>
<td>-3.13</td>
</tr>
</tbody>
</table>

* $p < 0.05$. ** $p < 0.001$.

Table 4
Hierarchical Multivariate Linear Modeling Results for Social Comparisons, Belief in a Just World, and Positive Affect Predicting Daily Organizational Citizenship Behaviours

<table>
<thead>
<tr>
<th>Independent Variables</th>
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</tr>
<tr>
<td>BJW, $\gamma_{01}$</td>
<td>0.21**</td>
<td>0.05</td>
<td>3.90</td>
</tr>
<tr>
<td>Downward Comparison, $\gamma_{10}$</td>
<td>0.03</td>
<td>0.02</td>
<td>1.23</td>
</tr>
<tr>
<td>BJW, $\gamma_{11}$</td>
<td>0.06*</td>
<td>0.03</td>
<td>2.12</td>
</tr>
<tr>
<td>Upward Comparison, $\gamma_{20}$</td>
<td>0.003</td>
<td>0.02</td>
<td>0.18</td>
</tr>
<tr>
<td>BJW, $\gamma_{21}$</td>
<td>-0.07**</td>
<td>0.02</td>
<td>-3.27</td>
</tr>
<tr>
<td>Positive Affect, $\gamma_{30}$</td>
<td>0.21**</td>
<td>0.03</td>
<td>7.87</td>
</tr>
</tbody>
</table>

* $p < 0.05$. ** $p < 0.001$.

To determine if social comparisons have an indirect effect on daily OCB through PA we conducted two Sobel tests (1982): one for the indirect effect of downward comparisons and one for the indirect effect of upward comparisons. The Sobel test for the indirect effect of downward comparisons on OCB was significant ($t = 3.78, p < 0.001$) similarly indicated that downward social comparisons have a significant indirect effect on OCB through positive affect. The Sobel test for the indirect effect of upward comparisons was also significant ($t = -3.01, p < 0.001$) indicating that upward comparisons have a significant indirect effect on daily OCB through positive affect supporting Hypothesis 7.

Although not formally hypothesized to influence daily OCB, we also conducted the above analyses controlling for negative affect. The inclusion of negative affect did not change the pattern and significance of any of our findings. This treatment of negative affect in relation to OCB is consistent with previous studies that have either exclusively focused on positive affect (e.g., Ilies et al., 2006) or used negative affect as a control variable (e.g., Fritz & Sonnentag, 2005).

Discussion

The OCB literature has been effective in documenting attitudinal, task, organizational, and leadership factors that predict whether or not employees will engage in OCB (Organ & Ryan, 1995;
Podsakoff et al., 2000). However, in more recent years the literature has drawn criticism for its lack of developments (e.g., Zellers & Tepper, 2003). The aim of the current study is to reinvigorate the OCB literature and untangle motivational and affective drivers of OCB. To do so, we applied self-consistency theory, just-world theory, and AET to explain how the act of engaging in social comparisons at work can predict OCB.

Because self-consistency theory proposes that individuals will engage in behaviours that are consistent with their self-perceptions we proposed that social comparisons would predict OCB by changing participants’ self-perceptions of inferiority or superiority. Specifically, we predicted that positive self-perceptions would increase OCB and that negative self-perceptions would decrease OCB. We found partial support for these predictions as downward comparisons – superiority inducing comparisons – resulted in more OCB; however, downward comparisons – inferiority inducing comparisons – did not result in fewer OCB. To add precision to these predictions we introduced just world theory, and proposed that the strength of participants’ just world beliefs would alter the extent to which social comparisons result in OCB. As just world beliefs are an indicator of the extent to which individuals believe that the world is a fair place, the perception that one is better or worse than others will have different implications for those with strong versus weak just world beliefs. In other words, strong just world beliefs would increase an individual’s propensity to view status information as an indicator of deservingness whereas weak just world beliefs will decrease this propensity. Put simply, we expected our results to be the most consistent with self-consistency theory at high levels of BJW. Our results supported these expectations as upward comparisons generated fewer OCBs at high levels of BJW (Figure 1) and downward comparisons generated increased OCBs at high levels of BJW (Figure 2).

As social comparisons are known to have affective consequences (e.g., Greenberg et al. 2007) we were also interested in testing if positive affect acts a mediator in the relation between social comparisons and OCB. Examining affect as a mediator is consistent with AET, which purports that affect occurs in response to workplace events and serves as a proximal predictor of behaviour (Weiss & Cropanzano, 1996). Our data are consistent with these components of AET as we found that social comparisons predicted positive affect as well as illustrated that positive affect is a significant predictor of OCB, when controlling for the effects social comparisons. Formal tests of mediation revealed that positive affect mediated the effect of both upward and downward comparisons on OCB.

Limitations

A potential limitation lies in the fact that our data was self-report, introducing the potential criticism that common method variance (CMV) may account for our observed relations (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003). However, our use of the BJW measure may help allay some of these concerns. Specifically, BJW was measured on a separate occasion from the daily surveys and was found to have theoretically consistent effects with our daily measures. Additionally, BJW acted as a moderator variable, which, in and of itself, argues against the presence of CMV, as it is not readily apparent how CMV may strengthen the relation amongst variables only for people with high BJW (Evans, 1985).

Summary and Conclusion

In the current study, we investigated the role of daily upward and downward social comparisons in determining daily OCB. The theoretical basis of our hypotheses drew on the motivational and affective consequences associated with social comparisons and included the application of self-consistency theory, AET, and just world theory. Our data were consistent with theoretical expectations and helps extend our current understanding of the processes that lead to OCB. This extension of previous knowledge is achieved by illustrating the role that daily cognitive events and emotions can have in determining whether
or not employees will act in a prosocial manner. Furthermore, these states do not act in isolation, but interact with traits to determine behaviour. Future research and theory can extend these ideas and findings to achieve a more precise understanding of the complex processes that are involved in driving employee behaviour.
References


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