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Not in my Occupation: An Examination of Occupational Identification and Unethical Pro-Organizational Behaviour

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Abstract

Workplace identification has been investigated as a predictor of unethical pro-organizational behaviour (UPB), a form of unethical behaviour that primarily benefits the organization. While there have been fruitful findings for organizational identification, there is currently a lack of understanding for how other sources of identification influence this relationship. I sought to investigate whether occupational identification, defining oneself as a member of an occupation, would negatively moderate the relationship between organizational identification and UPB in an ethical decision-making study utilizing a sample of 193 accountants. Similarly, to past research, I hypothesized that moral disengagement would be a mediator in the model. Results indicated an unexpected negative non-significant relationship between organizational identification and UPB. Furthermore, occupation identification was negatively related to UPB, but not significant. I also unexpectedly found a significant negative mediating effect of moral disengagement. This research adds to the literature regarding whether identification relates to unethical behaviour.

Keywords: Workplace Identification, Organization Identification, Occupational Identification, Moral Disengagement, Unethical Pro-Organizational Behaviour, Unethical Behaviour, Honesty-Humility.
Summary for Lay Audience

Research has found that individuals tend to define themselves based upon the social groupings they belong to, for example, one’s organization (e.g., “I am an IBMer”) or occupation (e.g., “I am an accountant”). Past research has found that when someone defines themselves on their organization, they will be more likely to commit unethical behavior to benefit the organization. I sought to investigate whether defining yourself on your occupation would negatively relate to engaging in unethical behaviour for the organization. In other words, whether defining yourself as a part of your occupation would encourage you to not commit unethical behaviour for the benefit of one of your social groupings. I also investigated whether the ability to suppress your moral thoughts would influence this relationship (i.e., ignore your moral compass). I tested these hypotheses in a sample of 193 accountants in a series of ethical decision-making scenarios. I unexpectedly found that individuals who highly defined themselves on their organization were less likely to commit unethical behaviour for the organization, but the effect was not significant. I did find that individuals who were highly identified with their occupation were less likely to commit unethical behaviour for the organization, however, the effect was not significant. I also found that your ability to suppress your moral thoughts influenced this relationship significantly. This research indicates that identification may serve as a precursor to committing unethical behaviour, but only if someone suppresses their moral thoughts.
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Understanding oneself is a complex but important thought process. Understanding oneself partially stems from understanding what group memberships we hold, where we classify ourselves as part of a larger group of individuals (Ashforth & Mael, 1989). Defining the self as a part of a larger social grouping, or having a ‘social identity’, can be thought of as a perceived ‘oneness’ with a group of individuals that brings with it associated values and emotional significance (Ashforth & Mael, 1989; Tajfel, 1974). A large field of both theoretical and empirical papers has developed to explain how identities relate to various outcomes, such as in-group favouritism (Voci, 2006), status (Bettencourt, Charlton, Dorr, & Hume, 2001), turnover intentions from an organization (Riketta, 2005), and long working hours (Ng & Feldman, 2008). As such, social identification has also been found to be applicable to the workplace sphere (Ashforth & Mael, 1989).

Workplace identification is a specific form of social identification – the perception of oneness with a workplace. Workplace identification encompasses four sources of identification: organizational, team, occupational, and career (van Dick & Wagner, 2002). Put another way, an individual can identify with their organization, their team, their occupation, and their career, with the ability to differentially identify will each of these workplace targets simultaneously or only a select few. Typically, organizational identification has remained the focus of workplace identification research. Meta-analyses have found organizational identification to positively relate to contextual performance, psychological and physical health, job level, affective commitment, occupational and workgroup attachment, job and organizational satisfaction and to negatively relate to turnover intentions (Riketta, 2005; Steffens, Haslam, Schuh, Jetten, & van Dick, 2017). As this list shows, a majority of the workplace identification research has linked its presence to desirable workplace outcomes. However, leading scholars have urged workplace identification researchers to investigate the potential negative or ‘dark side’ to workplace identification (Ashforth, 2016; Conroy, Henle, Shore, & Stelman, 2017). For instance, Ashforth (2016) called for investigation into potential boundary conditions of
the construct to examine whether and when identification could be harmful to individuals and workplaces rather than beneficial. In line with this call to research, one area of inquiry that has grown in recent years is the relationship between identification and unethical behaviours to benefit an organization (Umphress, Bingham, & Mitchell, 2010).

Through the lens of social identification, it was hypothesized that individuals who defined themselves as a part of an organization would engage in unethical behaviour to benefit that organization. This concept was coined unethical pro-organizational behaviour (UPB; Umphress et al., 2010) and is considered unethical behaviour that primarily benefits the organization, as opposed to the individual per se. The research has been mixed in finding direct effects of organizational identity on UPB (Chen, Chen & Sheldon, 2016; Umphress et al., 2010). Rather, the majority of research on UPB has found that organizational identification interacts with or is mediated by other cognitive mechanisms to predict higher rates of UPB. While this research stream has found interesting results, it currently lacks an understanding of the multiple foci approach of workplace identification.

Like much of the general workplace identification research, UPB research has focused on only one of the four foci of identification: organizational identification. Considering a complete profile of identification, which includes how an individual identifies with their occupation, team and career, will allow for a much richer conceptualization of both the individual examined and resulting outcomes (Johnson, Morgeson, Ilgen, Meyer, & Llyod, 2006; van Dick & Wagner, 2002). As such, this thesis will specifically examine how occupational identification, defining oneself as a part of an occupational group, is related to engagement in unethical behaviour to benefit one’s organization. While there is a marked lack of research on occupational identification (e.g., van Dick, Wagner, Stellmacher, & Christ, 2004; Elsbach & Dukerich, 2016), I believe that occupational identification may mitigate unethical behaviour to benefit an organization because it is an identity typically associated with moral behaviours (Leavitt, Reynolds, Barnes, Schilpzand, & Hannah, 2012) and is also an identity held outside, and perhaps separate from, the organization. For instance, many occupations, particularly applied professions, have occupational regulations or codes of conduct that operate across
organizational boundaries. For instance, a nurse in Ontario has to practice within the code of conduct according to the College of Nurses of Ontario (CNO) in order to keep their license, regardless of the employing organization (e.g., http://www.cno.org/en/protect-public/code-of-conduct-for-nurses/). Therefore, this research seeks to investigate whether occupational identification will be significantly negatively related to unethical pro-organizational behaviour and moderate the positive relationship between organizational identification and unethical pro-organizational behaviour. These research hypotheses will be tested in a decision-making study using a specific occupational sample of accounting professionals.

To provide the theoretical framework for this research, I will first outline the core concepts in social identity theory, workplace identification, and UPB. Within this examination, an overview of the professional occupation of accounting and a rationale for its use as a research sample will be provided. Next, the study procedures, sample and materials will be provided. This is followed by a presentation of the research results and discussion including study limitations and directions for future research.

**Social Identity Theory**

Social identity was first conceptualized through social identity theory (SIT; Tajfel & Turner, 1979) and was later expanded through self-categorization theory (Turner, Hogg, Oakes, Reicher, & Wetherell, 1987). Social identity theory is based upon three key propositions: 1) individuals strive to maintain or enhance their self-esteem, 2) social groups and membership within them are associated with positive or negative value connotations, and 3) the evaluation of one’s own group is determined with reference to specific other groups through social comparisons (see Table 1 for a comprehensive list of propositions and principles; Tajfel & Turner, 1979, p. 16). From these propositions, a number of theoretical principles were inferred: 1) individuals strive to achieve or maintain positive social identities, 2) positive social identities are based to a large extent on favourable comparisons with out-groups, and 3) when social identity is unsatisfactory, individuals will strive to either leave their existing group or make their existing group more positively distinct (Tajfel & Turner, 1979, p. 16). These propositions and principles
are the basis for explaining why grouping factors (e.g., in-group and out-group) alone can influence a wide variety of behaviours, from allocating resources (Ben-Ner, McCall, Stephane, & Wang, 2009) to helping organizations (Lee, Park, & Koo, 2015).

Table 1

Propositions and Principles from Social Identity Theory (SIT) and Organizational Identification Literature

<table>
<thead>
<tr>
<th>SIT propositions (^a)</th>
<th>SIT principles (^a)</th>
<th>Organizational Identification propositions (^b)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) Individuals strive to maintain or enhance their self-esteem</td>
<td>1) Individuals strive to achieve or maintain positive social identities</td>
<td>1) Organizational identification is a perception of oneness with a group</td>
</tr>
<tr>
<td>2) Social groups and membership within them are associated with positive or negative value connotations</td>
<td>2) Positive social identities are based to a large extent on favourable comparisons with out-groups</td>
<td>2) Organizational identification stems from a categorization of individuals and prestige of organization</td>
</tr>
<tr>
<td>3) The evaluation of one’s own group is determined with reference to other groups via social comparisons</td>
<td>3) When social identities are unsatisfactory, individuals will strive to either leave their existing group or make their existing group more positively distinct</td>
<td>3) Organizational identification leads to activities or behaviours that are congruent with the identity held and support the institution from which the identity stems</td>
</tr>
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Note. \(^a\) = Tajfel and Turner (1979), \(^b\) = Ashforth and Mael (1989)

Arguably, the core of social identity theory is the notion that individuals naturally categorize themselves into groups and compare their respective group with other out-groups (Tajfel, Billig, Bundy, & Flament, 1971; Spears, 2011). This categorization and in-group favouritism has been extensively researched in both laboratory and field-based experiments (e.g., Ben-Ner et al., 2009; Voci, 2006). In Ben-Ner et al.’s laboratory experiment, it was found that participants had a preference for their in-group when allocating money, choosing to share an office, and commuting and working with members of the in-group versus members of the out-group. This effect has also been shown to be influenced by the saliency of an out-group and the threat that they pose to
the in-group (Voci, 2006). In Voci’s study of Italian university students, it was found that the saliency of the out-group threat, measured by negative qualities levied against the participant’s respective in-group, strengthened the in-group favouritism.

Part of social identification involves social comparison between one’s own group and respective out-groups (Spears, 2011). In other words, a group is only ‘real’ and important in relation to other groups. For instance, Lalonde (2002) conducted a repeated measures study which found that group comparisons resulted in higher identification with the in-group. In the organizational context, Bartel (2001) found that individuals who worked in boundary-spanning careers, where work requires that they interact with outside organizations, engaged in higher intergroup comparisons, which was related to increased self-esteem and increased organizational identification. These studies highlight that when another group is salient, social comparisons lead to higher identification with an individual’s respective in-group. This, in-turn, is the basis for engaging in behaviours that symbolize in-group favouritism, as is seen in laboratory identification studies (Ben-Ner et al., 2009).

Organizational and Occupational Identification

Organizational identification is an extension of social identity theory to the organizational environment and occurs when an individual perceives themselves as a part of an organization (Ashforth & Mael, 1989). Stated otherwise, organizational identification is when an individual bases a part of their self-identity on the organization (e.g., “I work at IBM” versus “I am an IBMer”). This topic has received significant attention in the organizational behaviour research domain (Riketta, 2005; Steffens, et al., 2017). Organizational identity is the result of viewing one of the most prominent forms of contemporary human congregation (the workplace) through the lens of one of the most prominent social psychology theories (Pratt, Schultz, Ashforth, & Ravasi, 2016). Organizational identity is primarily a relational construct that provides salient differences between individuals (e.g., he/she is a member of X organization, I am a member of Y organization), which can be utilized for intergroup comparisons (Pratt et al., 2016).
Organizational identification has benefitted from research that spans nearly 50 years (Brown, 1969; Steffens et al., 2017). One of the most notable contributions is Ashforth and Mael’s (1989) articulation of how the three main propositions from social identity theory noted above apply to organizational identification. They argued that organizational identification was an application of social identity theory, but more specifically that organizational identification made certain extensions: 1) it is a perception of oneness with a group (an organization), 2) it stems from a categorization of individuals, as well as the distinctiveness and the prestige of the organization, and 3) it leads to activities or behaviours that are congruent with the identity held and support the institution from which the identity stems (Ashforth & Mael, 1989; see Table 1 for a comparison of the propositions within organizational identification and social identity theory).

One of the most important notions of social identification theory, and by extension organizational identification, is that group members link their group membership with their own self-evaluations and self-esteem. This can have a positive or negative impact depending on the valence of that group. For example, this includes having positive self-evaluations when your organization obtains public praise for a new product, even when you were not directly part of the process (Ashforth & Mael, 1989; Tajfel & Turner, 1974). Part of the self-esteem an individual obtains from an organization is the external prestige that may come from their association with the organization (Fuller, Marler, Hester, Frey, & Relyea, 2006). For example, in Fuller et al.’s study with health services workers, they found that perceived external prestige of their organization was significantly positively related to organizational identification and significantly moderated by an individual’s need for self-esteem. This effect was found within meta-analysis studies as well (Riketta, 2005). Riketta found that organizational prestige had a medium size correlation with organizational identification. These studies provide support for the proposition that an individual’s identification stems from a categorization of individuals into social groupings and the relative prestige of that grouping (Ashforth & Mael, 1989).
General Meta-Analytic Findings

In terms of organizational identification as a general construct, it has often been found to be beneficial for individuals and organizations. For instance, it has been positively related to workplace attitudes (i.e. job satisfaction), context characteristics of the organization (i.e. prestige of an organization), and work-related behaviours (i.e. extra-role behaviours, such as helpful suggestions to the organization; Riketta, 2005). In Riketta’s meta-analysis on 96 independent samples, organizational identification was significantly positively correlated to extra-role work behaviours (r_c = .35), job satisfaction (r_c = .54), job involvement (r_c = .61), organizational prestige (r_c = .56), occupational and workgroup attachment (r_c = .47 and r_c = .52, respectively) and significantly negatively correlated to intentions to leave the organization (r_c = -.48). These findings indicate that organizational identity is not necessarily a construct that directly relates to in-role behaviour, or job performance, (r_c = .17 with 95% CI including 0 [-.01, .35]; Riketta, 2005), but is moreover important for workplace attitudes, contextual characteristics, and discretionary behaviour. Interestingly, Lee et al.’s meta-analysis also found that organizational identification was significantly related to organizational citizenship behaviour towards the organization (OCB-O; \( \hat{p} = .42 \), 95% CI[.32, .51]) and had a stronger relationship when compared to organizational citizenship behaviour towards coworkers (OCB-I; \( \hat{p} = .27 \), 95% CI[.09, .45]). These results indicate that individuals who identify strongly with their organization will engage in more beneficial discretionary behaviour towards their identification source, the organization, rather than the individuals that comprise the organization. This is supported within the original proposition of social identity theory: individuals will strive to enhance the group they identify with, which in this case, is through OCB-O and other related behaviours.

Organizational identification has also been researched in relation to employee health (Steffens et al., 2017). In Steffens et al.’s meta-analysis, utilizing over 58 independent samples, it was found that organizational identification was significantly positively related to health outcomes (r = .21). This relationship was stronger with indicators of well-being (r = .27) rather than the absence of stress (r = .18) and organizational identity had a stronger relationship with psychological health (r = .23).
than physical health \((r = .16)\). Steffens et al.’s study provided support that organizational identification invigorates individuals (positive relationships) rather than exhausts individuals (negative relationships). However, this conclusion is not without debate within the research discourse, as multiple studies have found that organizational identification can lead to increased stress and longer working hours (Ng & Feldman, 2008; Mühlhaus & Bouwmeester, 2016). For instance, in Ng and Feldman’s meta-analysis, indicators of organizational identity (e.g. organizational support) were significantly related to hours worked, which was positively related to job stress \((r_c = .13)\) and mental strain \((r_c = .06)\). This, along with interview-based research (Mühlhaus & Bouwmeester, 2016), has provided a more nuanced view of organizational identity. However, there is a consensus within the organizational sciences that organizational identity is a healthy process for certain employment outcomes (e.g. contextual performance or psychological health; Riketta, 2005; Steffens et al., 2017).

**Occupational Identification and Foci of Attachments**

Occupational identification is a very similar construct to that of organizational or social identification. Like organizational identification, occupational identification is defined as the conscious awareness of oneself as a worker with a focus on the chosen occupation or profession (Skorikov & Vondracek, 2011). In theory, it can be argued that occupational identity is a more stable identity than organizational identity, particularly in the prevailing labour market context (Albert, Ashforth, & Dutton, 2000) – an individual can move to many different organizations, but still maintain the same occupational source of identity (e.g., “I am an accountant and have worked in X Y and Z organization”). Indeed, this has led some to call for a return to the occupation as a nexus of study rather than the organization (Barley & Kunda, 2006).

While growing, there are relatively few studies on occupational identification in psychological and organizational behaviour literature, however, the notion of occupational identity appears in other literatures. Indeed, there is a related concept of occupational community which has arisen from the sociological literature and in-depth qualitative analysis of occupations (Salaman, 1971; Weststar, 2015). Occupational communities are defined as a group of people who are engaged in the same type of work,
whose identity is drawn from their respective work, and who share a set of values and norms that apply to and extend beyond purely work matters (Van Maanen & Barley, 1984). Community members develop a sense of belonging that is based upon shared understanding of the ‘boundaries’ or parameters of inclusion of their occupation and a strong and highly valued social identity based upon those boundaries (e.g. Campbell, Li, Yue and Zhang, 2016; Weststar, 2017). This is reinforced through in-group referencing and out-group comparison and extends into non-work social relations (Van Maanen & Barley, 1984). As with the organizational identification and occupational identification distinction, within the framework of occupational community, researchers can situate the occupation as a distinct construct separate from organizational norms and cultures and interpret findings through the lens of an individual who has a particular occupation (e.g., ‘lawyer’) rather than simply an employee of a larger organization (e.g., ‘employee of the national bank’). While occupational community is not the primary framework or nomenclature utilized for this study, it is important to note the importance of occupational identification in the wide variety of workplace literatures that exist.

**Research on Occupational Identification**

Research has examined the relationship between occupational identification and a variety of outcomes, such as lower work strain (Elovainio & Mivimäki, 2001), higher worker engagement (Hirschi, 2012), turnover intentions and experienced anger (Conroy, Becker, & Menges, 2017). While occupational identification has important outcomes in its own right, it is often examined in conjunction with other forms of identity, mainly organizational identity, in an increasing field of research about multiple identities (Elsbach & Dukerich, 2016; Johnson et al., 2006; van Dick, 2017). For instance, van Dick and colleagues (2004) found that occupational identity predicted unique variance above organization identification in team climate, job satisfaction, and OCB. Similarly, van Dick and Wagner (2002) found that teacher’s occupational identification was positively related to OCB, motivation, meaningfulness, job satisfaction, and growth satisfaction, while being negatively related to intentions to retire early and physical illness symptoms. Johnson et al. (2006) also found support for the different foci of identification within a study utilizing veterinarians who worked in different
organizational settings and positions (e.g. non-veterinary medicine, veterinary associate, and veterinary owner). They found that each identification source contributed unique variance to job satisfaction. For instance, veterinarians who worked in non-veterinary medicine organizations had a stronger identification with their occupation than their organization, but identified more strongly with their workgroup than their profession. Conversely, veterinarians who were owners of their organization had a stronger identification with their organization than with their workgroup or their profession. These results follow social and organizational identity theory which indicate that the saliency (e.g. workgroup, occupational field) and prestige of the identification target can create a stronger attachment to the identity source (Johnson et al., 2006; Riketta, 2005; Voci, 2006).

**Occupational Identities as a Basis for Moral Decision Making**

While not a large body of work, there is research indicating that occupational identities may be a basis for moral judgements (Leavitt et al., 2012) or as ways to manage engaging in morally ambiguous or ‘dirty’ work (e.g., using coercive force as a police officer; Dick, 2005). Leavitt et al. found that priming occupational identities for individuals with dual identities, in this case medics or engineers, would lead to engaging in less morally compromising behaviour, such as a medic being less likely to put a dollar value on a human life or an engineer being less likely to bribe government officials with luxury items to obtain a contract. Similarly, work which entails aspects that are degrading or demeaning to individuals who are performing the work (Kreiner, Ashforth, & Sluss, 2006), has also been investigated with regard to an individual’s occupational identity. It has been proposed that individuals who engage in morally compromising work will either dis-identify with the occupation or engage in various cognitive defensive techniques to validate one’s occupational identity (Kreiner et al., 2006). In this research stream, Lai, Chan, and Lam (2013) found that the more casino workers perceived their work as morally dirty, the higher levels of occupational disidentification they experienced – in other words, if the identity primarily entailed continuous morally dirty work, individuals were less likely to self-identify with the occupation. In short, these few studies highlight that occupational identification, as a construct, may be morally bound or morally
significant in some way. As such, occupational identification may be an important determinant in whether individuals behave unethically within the workplace.

Furthermore, occupations typically have regulations and codes of conduct that inform members about ethical professional behavior. If previous theory is correct, individuals should strive to engage in behavior congruent with the source of the identity from which they define themselves. Relating back to occupational identity, if individuals define themselves on their occupation, they should enact behaviours that are congruent with their occupation’s set of expected behaviours. As such, this provides occupational identity with a potential unique property: a set of behavioural expectations that are set forth by a regulatory body or code of law.

**Unethical Pro-Organizational Behaviour**

Unethical pro-organizational behaviour (UPB) is defined as unethical acts that seek to benefit the organization (Umphress et al., 2010). This definition allows a clearer perceptual distinction between UPB and other forms of unethical behaviour, such as theft or fraud (Treviño & Victor, 1992), that have a direct benefit to the individual performing the behaviour. UPB is based on work within behavioural ethics and maintains the historical conceptualization of unethical behaviour as “illegal or morally unacceptable [behaviour] to the larger community” (Jones, 1991, p. 367), but narrows its focus to specific categories of unethical behaviour. UPB focuses on acts of commission (e.g. faking part of a financial report) and omission (e.g. withholding information about a product).

In Umphress and Bingham (2011)’s theoretical model of UPB (see Figure 1), it is assumed that strong organizational identification will compel individuals to engage in unethical behaviour to help an organization, typically through a process of suspending their moral thoughts to not feel guilt after the unethical act. Within this model, it is assumed that higher organizational identification and positive social exchange would predict UPB through a mediating neutralization process which alleviates the negative self-judgment of engaging in unethical behaviour. The theoretical basis for this line of thought comes from assumptions made within social identity theory and the
organizational identification literature (Ashforth & Mael, 1989; Tajfel & Turner, 1979). According to these literatures, identification is largely influenced by the positive cognitive association that an individual has with an organization, and when the organizational identity is unsatisfactory, individuals will strive to either leave their existing organization or make their existing organization more positively distinct (Ashforth & Mael, 1989; Tajfel & Turner, 1979). Furthermore, positive social identities are largely based upon favourable comparisons with out-groups (Tajfel & Turner, 1979). Based upon these theoretical assumptions, individuals may engage in unethical behaviours that will result in their group being more positively distinct, therefore allowing their group to have a more favourable comparison with other groups. In other words, by helping the organization, it assists the individual with seeing their respective organization as positively distinct when compared to other organizations (Umphress et al., 2010).

![Figure 1](image_url)

*Figure 1.* The theoretical model for identification leading to engaging in UPB (Umphress & Bingham, 2011, p. 627).

Similarly to other areas of unethical behaviour (Ogunfowora, Bourdage, & Nguyen, 2013), UPB has been investigated with respect to the different cognitive mechanisms that may validate engagement in unethical behaviours. These include positive reciprocity beliefs (Umphress et al., 2010; Umphress & Bingham, 2011) and
moral disengagement (Chen et al., 2016). Positive reciprocity beliefs are the general obligation that employees should give back beneficial behaviour if they have received benefits from the employer (Moliner, Martinez-Tur, Peiró, Ramos, & Cropanzano, 2013). In a premiere article on UPB, Umphress et al. (2010) found that there was an interaction between positive reciprocity beliefs and organizational identification, predicting higher UPB in a sample of court jurors and online survey respondents. When positive reciprocity beliefs were high, the effect of organizational identification on UPB was strengthened. It should be noted that in both Umphress et al.’s (2010) samples, organizational identification was only significantly related to UPB through the moderating effect of positive reciprocity beliefs; however, later work has suggested that the incorporation of a more realistic salient out-group scenario may be required to make organizational identification significantly related to UPB, regardless of the cognitive mechanism (Chen et al., 2016).

While a few researchers have found that other constructs can predict UPB, such as job insecurity (Ghosh, 2017), supervisor identification (Johnson & Umphress, 2018), and job satisfaction (Dou, Chen, Lu, Li, & Wang, 2018), a major advancement within the UPB literature came from Chen et al. (2016) who tested whether other aspects of social identity theory can influence the relationship between organizational identification and UPB. Chen et al.’s (2016) studies incorporated an important assumption within social identity theory – the saliency of a realistic out-group within UPB decision making scenarios. According to propositions within social identity theory (Tajfel & Turner, 1986), the saliency of an out-group is one of the only means that an individual can compare and contrast their relative in-group (Spears, 2011). When the out-group is salient, it activates the saliency of an individual’s own group identity (Spears, 2011) and encourages different engagements of behaviour, such as higher identification, positive evaluation of the-in group, and higher self-esteem (Bartel, 2001; Lalonde, 2002). With this addition of out-group saliency, Chen et al. found organizational identification to be significantly related to UPB across 3 samples of working adults. I attempt to activate this out group saliency by situating the study within a sample of participants from the profession of accounting. This profession has strong occupational boundaries and typically deals with outside stakeholders on a regular basis.
Moral Disengagement

As stated above, Umphress and Bingham (2011) outlined a theoretical model for why individuals would engage in UPB. A focal point of the model is the mediating effect of a neutralization process where moral content or unethical actions are overlooked (Umphress & Bingham, 2011). Moral disengagement, which is a set of cognitive mechanisms that inhibits an individual’s moral self-regulatory processes (Detert, Treviño, & Sweitzer, 2008; Moore, Detert, Treviño, Baker, & Mayer, 2012), fits within the conceptualization of a neutralization process. Individuals who morally disengage are able to commit unethical behaviour and not experience negative emotion outcomes, such as guilt. There is supporting evidence that moral disengagement plays a mediating role between multiple predictors of unethical behaviour and unethical behaviour itself, for instance: empathy, cynicism, locus of control, and moral identity (Detert et al., 2008). In the organizational realm, it was found that moral disengagement significantly mediated the relationship between organizational identification and UPB in all three samples of Chen et al.’s (2016) study. More specifically, Chen et al. found that the relationship between cheating on self-reported test scores and typical scale measurements of UPB (e.g. Umphress et al., 2010) were all significantly mediated by moral disengagement. In theory, individuals with high organizational identification may engage in moral disengagement because of the anonymity that a group can provide (Chen et al., 2016). Furthermore, engaging in moral disengagement allows individuals to avoid the anticipated guilt or negative emotional states that arise after committing unethical behaviour (Detert et al., 2008). Therefore, engaging in moral disengagement in an ethically compromising situation would provide highly identified individuals with desirable outcomes – an organization that benefits and the avoidance of negative emotional states. It may be understood that by not acting in the interest of the organization, ethically or not, it may hamper the ability of an individual to draw positive self-evaluations from their membership (Tajfel & Turner, 1986).
The Present Study

While research has shown how organizational identification is a beneficial construct for most individuals, especially in the areas of psychological health and extra-role performance (Riketta, 2005; Steffens et al., 2017), much less work has been done on the potential negative outcomes that can result from this process (Elsbach & Dukerich, 2016). Recalling the original propositions put forward in social identity theory (Tajfel & Turner, 1979), and more recently within organizational identity theory (Ashforth & Mael, 1989), individuals will engage in behaviours or activities that are in accordance with their held social identities and strive to make their group positively distinct. Individuals also have a vested interest in their organization’s success and failures as it is a source of status from which individuals can draw positive associations (e.g., “I am an IBMer”; Riketta, 2005). Therefore, individuals who are highly identified with an organization have a vested interest to protect it. However, the literature on this subject lacks an understanding of how these same theoretical propositions and principals apply to individuals who have multiple identifications. More pertinent to this paper, I seek to address the literature gap on whether strong occupational identity, which may be significantly related to moral decision making (e.g., Leavitt et al., 2012), reduces the likelihood that an individual would engage in unethical behaviour to assist an organization (i.e., UPB).

I seek to bring together the diverse literature reviewed above and build upon past research to develop the model tested (see Figure 2 for full model). I seek to replicate previous research indicating that organizational identification is positively related to engaging in UPB (Chen et al., 2016; Umphress et al., 2010; Umphress & Bingham, 2011) based upon the theoretical ground that individuals will engage in behaviour congruent with their held identity and will strive to make their group positively distinct:

Hypothesis 1: Organizational identification is significantly positively related to unethical pro-organizational behaviour.
While organizational identities are an important determinant of decision making and workplace attitudes (Lee et al., 2015; Riketta, 2005; Umphress et al., 2010), an individual’s occupational identity should also be an important determinant of decision making. The theoretical rationale following social and organizational identity theory (Ashforth & Mael, 1989; Tajfel and Turner, 1979) and occupational community norms (Haas & Park, 2010; Van Maanen & Barley, 1984) indicates that an identity separate from the organization, which potentially has a moral basis (Leavitt et al., 2012), should lead to decisions that diverge from the commitment of unethical behaviour for the benefit of the organization. Therefore, I also hypothesize that occupational identification should be negatively related to unethical pro-organizational behaviour as the foci of attachment is outside of the organization (Spears, 2011) and typically associated with a code of conduct or set of moral expectations:

**Hypothesis 2**: Occupational identification will be significantly negatively related to unethical pro-organizational behaviour.

As noted above, moral disengagement has been investigated as the cognitive process that underlies ethical decision-making by inhibiting an individual’s moral self-regulatory process (Detert et al., 2008; Moore et al., 2012). Without this process of
suppression, it is theorized that individuals would be less likely to engage in unethical behaviour because they would anticipate negative emotional states, such as guilt, as a result of engaging in unethical behaviour (Stanger, Kavussanu, Boardley, & Ring, 2013). Based upon this logic, I chose to replicate previous research (Chen et al., 2016) and past theoretical work (Umphress & Bingham, 2011) in examining whether a neutralizing cognitive process, such as moral disengagement, would significantly mediate the relationship between organizational identification and unethical pro-organizational behaviour:

**Hypothesis 3**: Moral disengagement will significantly positively mediate the relationship between organizational identification and unethical pro-organizational behaviour.

While there is research that indicates organizational identification can lead to unethical pro-organizational behaviours (Chen et al., 2016; Ploeger & Bisel, 2013; Umphress et al., 2010; Umphress & Bingham, 2011), much less is known about how multiple identification sources influences this relationship (Elsbach & Dukerich, 2016). Therefore, I seek to build upon the understanding of individuals in the workplace with a more holistic identification profile. This is especially important because it has been shown that individuals can have multiple distinct foci of attachments, which can have unique outcomes (Johnson et al., 2006; van Dick & Wagner, 2002; van Dick et al., 2004). Furthermore, occupational identification may be a stronger predictor of ethical decision making - an individual has more volitional choice in their occupation that can stay with an individual across multiple organizations (Skorikov & Vondracek, 2011). Therefore, occupational identification may be an important determinant in examining how individuals within the workplace behave, whether it is more consistent with their potentially more stable identity of the occupation (Caza, Moss, & Vough, 2018; Leavitt et al., 2012) or more consistent with the saliency of the organization (Umphress et al., 2010).

If individuals have a wider array of identities with unique associated values or behavioural expectations (e.g. their organizational identity versus occupational identity),
they should be able to make decisions that are not necessarily just to protect and benefit one of their social groupings (Ploeger & Bisel, 2013), as has been found within organizational identification research (Chen et al., 2016; Umphress et al., 2010). However, this theorizing does not equate multiple profiles with ethical decision making, rather it suggests that individuals may take a more balanced approach to decision making if one of their identities is based outside of the intended unethical target and is moral in nature. Based upon this line of thought, individuals who have strong occupational identification should be less likely to engage in UPB because their occupational identification provides another social categorization from which to derive their positive evaluations. Furthermore, occupational identities may exemplify values and codes of conduct that discourage unethical behaviour (e.g. “a lawyer must not, in an attempt to gain a benefit for a client, threaten, or advise a client to threaten”; Federation of Law Societies of Canada, 2017). As such, I hypothesize that:

**Hypothesis 4**: Occupational identification will significantly negatively moderate the relationship between organizational identification and unethical pro-organizational behaviour.

**Examining the Influence of Context**

Previous research on UPB has typically utilized general research participants (e.g., general Mechanical Turk participants or university students) and general questionnaires for UPB (Umphress et al., 2010). While this research stream has proved fruitful, there is research within the psychological and organizational behaviour domains that questions whether attitudes have different influences depending on the context of the participant (e.g., Van Iddekinge, Taylor, & Eidson, 2005; Lee, Carswell, & Allen, 2000). In their meta-analysis, Lee et al. (2000) found that the relationship between occupational commitment (defined as an individual’s attitude toward their vocation or occupation) and multiple outcomes was significantly different based upon the context in which the individual worked. More specifically, working in a professional or nonprofessional environment, or whether your organization’s values matched your occupation’s values, resulted in differences on job satisfaction, affective organizational commitment, occupational turnover intentions, and organizational turnover intentions. For instance,
individuals were more likely to be affectively committed to their organization if their organization had compatible values and missions with their occupation ($r_c = .48$) than if they did not ($r_c = .23$; Lee et al., 2000, p. 806). While commitment is a distinct concept when compared to identification, the concepts are very highly correlated and are theorized to work together to explain workplace motivation and behavior (Meyer & van Dick, 2006). In the identification literature, this concept has received similar findings. For instance, Marique, Stinglhamber, Desmette, and Goldoni (2014) found that when individuals perceived their workgroup to be similar to their organization, they had a stronger positive relationship with their organization than if they perceived low similarity. Put otherwise, individuals who perceived similarity between their workgroup and organization identified more highly with the organization. Similarly, Marstand, Epitropaki, and Martin (2018) found that perceived value congruence between leaders and employees was related to higher identification with leaders. An overview of this research indicates that the context in which individuals work and their relation with other identification sources can influence important organizational outcomes.

In the UPB domain, the Umphress et al. (2010) scale utilizes a contextually non-specific conceptualization of UPB, where the respondent answers generic questions about whether they would misrepresent the truth to help their organization. While this research stream has proven to be fruitful, it does not take a context specific approach and therefore may not reflect what UPB would be like in a real organizational setting for professional individuals (e.g., accountants, lawyers, nurses). This general approach to UPB may also lack the specificity for an interaction between identifications – there may not be enough context for an individual’s occupation or its associated values to influence the relationship. This becomes especially troubling with research indicating that context influences the relationship between workplace attitudes and relevant outcomes (e.g., Lee et al., 2000; Marstand et al., 2018). Continuing this line of thought, the UPB scale can fit well with relevant organizational constructs, for instance organizational identification, but may lack the context for an occupational relevant construct. For instance, answering the item “If my organization needed me to, I would withhold issuing a refund to a customer or client accidently overcharged” (Umphress et al., 2010) would be a poor
fitting item to measure a situation a university professor may encounter – they typically do not deal with issuing undergraduate student’s overcharge fees.

Therefore, I sought to examine a context specific conceptualization of UPB within the profession of accounting. By including context through a UPB decision-making scenario, it allows for a richer examination of how identification can exert an influence on UPB. As will be discussed below, through a series of interviews, several decision-making vignettes were developed that are accounting specific. Each scenario provides the participant an opportunity to engage in UPB tailored to fit within the accounting field.

As past researchers have indicated (e.g., Johns, 2006), it is important to provide a contextual description of a study’s research design and participants to achieve a holistic understanding of the research conducted. For example, the work environment and occupational norms of an air traffic controller are quite different from a professor, a mechanic or an accountant. Therefore, I believe that the occupational context of participants is important to understand before turning to the analyses. Given the focus on occupational identity, the present study chose to situate our examination of pro-organizational unethical behaviour within the occupation of accounting. As such, I have provided a brief contextual overview of accounting work.

**Context of the Sample: Accountants**

According to the occupational information network (https://www.onetonline.org/), which is a database of occupations and their requirements maintained by the United States’ Department of Labor, accountants are typically involved in developing and analyzing budgets for organizations. This includes the requirement to create financial reports that will be utilized by many different stakeholders, such as shareholders or government tax departments. Accountants require a strong understanding of economics, accounting, mathematics, and the regulatory laws of accounting. To become a chartered professional accountant, referred to as a certified public accountant in the United States, it typically requires a minimum of a bachelor’s degree in accounting and passing a certification examination that tests applicants on the general knowledge of accounting.
Accounting regulatory laws are outlined within the Generally Accepted Accounting Principles (GAAP), which is approved by a regulatory body. In Canada this body is the Chartered Professional Accountants (CPA) of Canada. CPA Canada works globally with the International Federation of Accountants and the Global Accounting Alliance to build the profession internationally (https://www.cpacanada.ca/en). GAAP is the regulatory standard of accounting and outlines what accountants should and should not be doing regarding the preparation of financial statements. Within Canada, GAAP is produced by the Accounting Standards Board (AcSB) and adheres to the International Financial Reporting Standards (IFRS), which is a set of accounting rules or principals that are utilized in many countries around the world. CPA releases a handbook that outlines specific GAAP regulatory laws and examples for accountants to follow (CPA Handbook; Chartered Professional Accountants of Canada, 2019). These regulatory laws are then meant to guide practice within the field of accounting.

As a self-governing professional body, accountants can be seen as having a particularly unique occupational identity and community – they require very specific knowledge, training, and testing requirements in order to become fully fledged accountants. Furthermore, accountants may work in disparate fields (e.g., construction or at a university), but still must maintain adherence to a singular regulatory law set forth by GAAP and utilize the same skill set across a variety of positions (e.g., executive positions; Campbell et al., 2016) or specialties (Lawrence, 1998). Research has discussed how professional regulation can impact the way that professionals understand and carry out their work (e.g., Pioch, Schmidt, & Ruth, 2001). For instance, financial incentives for accounting professors in Spain resulted in a switch from publishing professional papers to publishing academic papers (Moya, Prior, & Rodríguez-Pérez, 2015). Similarly, the internationalization and enforcement of professional accounting standards has escalated in the wake of accounting scandals through the early 2000s (i.e., Enron, Worldcom) and resulting legal reforms (Campbell et al., 2016). This has caused the accounting field to self-advocate for transnational accounting reform to increase certainty in the profession, negate financial risk, and focus on how organizations should operate (Botzem, 2014; Gillis, Petty, Suddaby, 2014).
The major accounting scandals of Enron and Worldcom highlight the high degree of autonomy and professional discretion embedded in accounting work. The problem with Enron, for instance, was that the company recognized long term revenue immediately, overemphasized profits from smaller deals, and hid the company’s debt from its financial records. In the end, Enron overstated its earnings on financial reports by $586 million dollars, was over $6 billion in debt and was forced to file for bankruptcy (Lowery & Blinebry, 2014). Even with major legislative reforms in the wake of these scandals to increase regulatory oversight, considerable professional discretion remains. This creates a large grey-area and opens the door for individuals to engage in unethical behaviour.

This was also clear in our interviews with experienced accountants (discussed below); accounting as a profession requires frequent judgment calls that are not necessarily ‘black and white’. Answers to questions and solutions to problems are not simple – accountants are often required to document or account for expenses, or anticipated expenses, for organizational assets that may or may not happen. For example, accountants are expected to ‘accrue’ an amount for warranty replacements of a particular item, which is an estimation of expenses for warranties that will occur (e.g., an organization expects $50,000 in warranty claims on their new television). While this judgment can be based on multiple factors (e.g., talking to the engineers of the product, assessing whether the materials are strong or not, past practice and experience), it is completely up to the accountant whether the product can be accrued at, say, 7% or 12% for warranty replacements per year. In this example, an accountant could choose a higher accrued expense (12%) in order to report less revenue to the government and, in turn, save the organization money on taxes. If the accountant is knowledgeable that their accrual is primarily to benefit the organization, and not based upon the real expense expected, it would be considered unethical in nature. Therefore, there is a lot of room within accounting, as a profession, to make judgment calls that could be considered UPB in nature. This makes it an ideal space to study both occupational identity and UPB.
Method

Participants

To test my hypotheses, I utilized a sample of 193 accountants (49.50% male, 49.50% female, 0.50% other) who were either currently working as an accountant or had worked as an accountant in a previous job. Participants ranged in age from 21 to 67 years ($M = 37.10$, $SD = 10.66$). In terms of working status, 175 (90.20%) participants worked full-time jobs, with another 16 (8.20%) participants working part time and 3 (1.50%) unemployed or retired. In terms of location, 161 (83.00%) participants were from the United States, 32 participants (16.50%) were from Canada, and 1 (0.50%) participant declined to answer. A majority of the participants, 163 (84.00%), were not a student at the time of participation. Of the individuals who indicated they were a student, a majority were taking courses while they worked full time. With regard to specific accounting roles, 125 (64.77%) participants worked in internal accountant roles (e.g., working primarily within one organization), 38 participants worked in external accountant roles (e.g., consultant at a firm; 19.69%), and 30 participants (15.54%) worked in other accounting roles not listed. Participants were asked to indicate one or more areas of accounting specialty. There were 63 participants who specialized in audit, 49 who specialized in tax, 26 who specialized in government tax, 102 who specialized in finance, and 34 who specialized in other smaller areas of accounting or has industry-specific specializations (e.g., construction).

Participants were recruited through two methods (described below): 1) university alumni mailing list and 2) Amazon’s Mechanical Turk with the job function of accounting or finance required. In total, 32 participants were recruited from the university alumni mailing list and 161 participants were recruited through Amazon’s Mechanical Turk. Participants were excluded from data analysis if they failed 2 attention checks, did not fill out more than 2 items of a scale, and if they were not from an accounting profession. In total, 29 responses were excluded due to individuals taking the survey more than once, 56 participants were excluded for never working as an accountant, 4 participants were excluded due to failed attention checks, 3 participants were excluded
for failing to answer more than 2 items on any questionnaire, and 1 participant was excluded for failing to select a gender, resulting in a final sample size of 193 participants.

**Materials**

**Organizational and Occupational Identification.** To measure participant’s organizational and occupational identification, Mael & Ashforth’s (1992) workplace identification scale was utilized (Appendix A). The scale consists of 12 items that are measured on a 5-point Likert scale of 1 (*strongly disagree*) to 5 (*strongly agree*), with two of those items being reverse keyed. In order to measure both organizational and occupational identification, the workplace identification scale was administered twice with each version having unique identification target words. Identification with each target was assessed by inserting the words *organization* (e.g. “when someone criticizes my *organization*, it feels like a personal insult”) or *occupation* (e.g. “when someone criticizes my *occupation*, it feels like a personal insult”) to represent each measure of identification. The workplace identification scale has shown good reliability for both the organization (α = .89) and the occupation (α = .84) versions (Johnson et al., 2006). The workplace identification scale has also been found to be one of the most utilized and reliable organizational identification scales (Riketta, 2005).

**Unethical Pro-Organizational Behaviour and Organizational Citizenship Behaviour.** As noted above, I developed a context-specific version of Umphress et al.’s (2010) UPB measure focused on my target sample of accountants (see Appendix B). To aid in the development of this measure, I interviewed four accountants who had over 20 years of experience in the field (\(M = 26.25, SD = 6.75\)). The interviews were semi-structured and designed to elicit realistic examples of UPB that could occur within accounting. Specifically, participants were provided with the definition of UPB by Umphress et al. (2010), provided with the UPB scale (Umphress et al., 2010), and asked open-ended questions about instances of UPB within the accounting profession (e.g. “Can you describe in detail any scenarios that are an example of an accountant behaving unethically to benefit the organization or company they work for?”). After participants provided the examples of UPB in accounting, they were asked whether the behaviour
described primarily benefitted the organization (versus the individual) and whether they believed the profession at large would consider the behaviour unethical.

The interviews resulted in the construction of 10 UPB decision-making scenarios. In addition to the 10 UPB decision-making scenarios, I developed six organizational citizenship behaviours towards the organization (OCB-O) that were accounting specific decision-making scenarios (Appendix C). The OCB-O scenarios were developed by adapting the Lee and Allen’s (2002) six item scale of OCB-O. The OCB-O decision-making scenarios were incorporated due to past work indicating that UPB was a distinct factor from OCB-O (Umphress et al., 2010) and to potentially aid in the study deception utilized – if participants only received a string of UPB decision-making scenarios, they may have been more likely to guess the study’s hypotheses. Both the developed UPB and OCB-O scenarios were returned to the interviewed accountants in an online survey. They were asked to rate whether the scenarios were a realistic representation of a dilemma an accountant may encounter, whether the scenario was unethical in nature, and to comment on whether there were any factual errors in the scenario (See Appendix D for experts ratings on the scenarios). Two UPB scenarios were discarded due to an error in the scenario with regard to an accounting process (i.e., saying an item in taxes can be depreciated at the accountant’s choice – this is not true for tax purposes). Another two UPB scenarios were discarded due to lack of inter-rater agreement in whether the scenario primarily benefitted the organization or the individual. In terms of OCB-O, one scenario was discarded due to a lack of inter-rater agreement on whether the OCB-O behaviour was unethical in nature. This resulted in six UPB and five OCB-O scenarios. Each scenario was presented with an item stem that asked participants to rate their likelihood of engaging in the behaviour (UPB or OCB-O, respectively) on a 7-point Likert scale of 1 (Very unlikely) to 7 (Very likely) (see Appendix B and C).

**UPB Umphress et al. (2010) Scale.** The original UPB scale developed by Umphress et al. (2010) was also given to participants (Appendix E). This scale consists of six items (e.g., “If it would help my organization, I would misrepresent the truth to make my organization look good.”) that were measured on a 7-point Likert scale of 1 (Strongly
disagree) to 7 (Strongly agree). Past research has indicated that the UPB scale has high internal consistency ($\alpha = .90$; Umphress et al., 2010).

**Moral Disengagement.** The propensity to morally disengage scale (PMD; Moore et al., 2012; Appendix F) was utilized to measure moral disengagement. The scale contains eight items (e.g., “It is okay to spread rumors to defend those you care about”) that are rated on a 7-point Likert scale of 1 (Strongly Disagree) to 7 (Strongly Agree). This scale has been shown to have consistently high reliability across multiple samples ($\alpha = .70$ to $\alpha = .90$; Moore et al., 2012). In the original scale development (Moore et al., 2012), it was found that the PMD one factor solution with 8 items scale had good fit indexes ($\chi^2 (20) = 27.00, p > .05$, RMSEA = .045, CFI = .99) when compared to the 16 item measure ($\chi^2 (104) = 254.00$, RMSEA = .099, CFI = .93) and the 24 item measure ($\chi^2 (588) = 588.00$, RMSEA = .090, CFI = .91). Based on these results, I chose to utilize the 8 item PMD scale.

**Social Desirability.** The social desirability scale (Appendix G) utilized was developed by Reynolds (1982) as a short form of the social desirability scale developed by Crowne and Marlowe (1960). The scale contains 13 items (e.g., “No matter who I’m talking to, I’m always a good listener.”) measured on a dichotomous scale of 1 (false) and 2 (true), with five items reverse keyed. Higher averages on this scale equal higher social desirability. The social desirability scale has been shown to have acceptable levels of reliability ($\alpha = .76$; Reynolds, 1982).

**Honesty-Humility.** In order to control for personality factors that are likely to influence ethical decision-making, I chose to utilize the honesty-humility sub-scale from the HEXACO-60, developed by Ashton and Lee (2009; see Appendix H). The honesty-humility scale contains 10 items (e.g., “I wouldn't use flattery to get a raise or promotion at work, even if I thought it would succeed”) measured on a 7-point Likert scale of 1 (Strongly disagree) to 7 (Strongly agree), with six items reverse keyed. Previous research has indicated that the 10 item measure of honesty-humility has good levels of internal consistency ($\alpha = .74$ to .79).
Procedure

**University Alumni Network.** An email script (see Appendix I) was sent to an alumni mailing list from a graduate accounting program by an accounting professor at a North American university. The script included a short message that invited accounting alumni to participate in a study that was aimed at understanding how to select high quality student applicants for competitive accounting programs. Participants were then directed to an online survey hosted by Qualtrics, where they were presented with a letter of information (see Appendix J) and invited to click the survey link if they felt inclined to participate. Participants were initially compensated a $5 Amazon gift card for completing the survey, however, due to multiple individuals scamming the survey to receive multiple gift cards, we had to change the compensation system to a draw for a $25 Amazon gift card.

**Amazon’s Mechanical Turk.** Amazon’s Mechanical Turk is a crowd sourcing website that connects businesses or researchers with workers. This platform allows a job to be posted for workers to accept and complete. Mechanical Turk is often utilized within social science research, and especially within organizational behaviour research, due to its large amount of full or part-time working adults who are from a North American background (e.g., Chen et al., 2016). Over 75% of workers are located in the United States (Difallah, Filatova, Ipeirotis, 2018). Research has also indicated that Mechanical Turk workers are typically born after 1980, have a lower household median than the general United States population, and have an almost equal gender distribution (51% male; Difallah et al., 2018). Mechanical Turk contains multiple features that prevent the same workers from continuously receiving and taking your survey and enables worker screening, whereby your survey will only be shown to specific Mechanical Turk workers. I utilized a filter on Mechanical Turk to only allow individuals from the United States or Canada who have worked within accounting or finance to view and accept my job posting. Similarly to the university alumni recruitment network, the Mechanical Turk recruitment script (see Appendix K) invited participants to participate in a study that was aimed at understanding how to select high quality accounting students for a competitive university accounting program. Within this recruitment script, participants were also told
that they would be compensated $2.00 (USD) for their time. From Mechanical Turk, participants were directed to our Qualtrics interface, where they had the option to read the letter of information (see Appendix L) and participate in the study. At the end of the study, they received a randomly generated code to enter into Mechanical Turk for compensation.

**Survey Procedure.** For both participant recruitment methods, the survey procedure was exactly the same except for the compensation procedure. After reading the letter of information and clicking through to the survey, participants were asked general demographic questions about gender, age, employment status, and occupational status. After this questionnaire, participants were presented with a set of distractor questions (Appendix M) that asked participants about their experience applying to accounting programs and how they think future accountants should be selected for accounting programs. These distractor questions and general deception were utilized to prevent participants from guessing that the study was about unethical behaviour, and as a result, answering in a socially desirable fashion (e.g., answering in a way that society would expect versus natural responding; Reynolds, 1982). Following this, the organizational identification, occupational identification, moral disengagement, and social desirability questionnaires were randomized in their presentation by Qualtrics software. Following these scales, the six UPB and five OCB decision-making scenarios were presented to participants in a randomized order. Every participant received all 11 scenarios. Next, the honesty-humility and Umphress et al. (2010) UPB questionnaires were given. The study closed with a debriefing document and information about the compensation protocol. After the debriefing document, participants were asked whether they were aware that the study was about ethical decision making prior to the debriefing document. The study took approximately 10 to 15 minutes to complete.

**Results**

**Examining Demographics and Manipulation Checks**

Before moving to an examination of the measurement properties of the UPB measure and the study’s hypotheses testing, I sought to examine whether any study
variables were influenced by general demographics, recruitment method, or compensation method. Due to participants being compensated differently within the university alumni network sample, I investigated whether this significantly impacted any of the variables in the study. There was a significant difference between participants who were compensated directly with a $5.00 Amazon gift card \((n = 22)\) and participants entered into a draw for a chance to win a $25 Amazon gift card \((n = 10)\) on moral disengagement \(t(28.88) = 2.26, p = .032\), and the UPB decision-making scenarios \(t(29.98) = 2.77, p = .009\). Participants compensated with a $5.00 Amazon gift card were more likely to morally disengage \((M = 2.78, SD = 0.48)\) than participants entered into a gift card draw \((M = 1.88, SD 0.58)\). Furthermore, participants compensated with a $5.00 Amazon gift card were more likely to engage in UPB within our decision-making scenarios \((M = 3.01, SD = 1.53)\) than participants entered into a gift card draw \((M = 1.91, SD = 0.70)\). However, it should be noted that the total sample size within each network compensation sample is relatively small \((n = 22 \text{ and } 10, \text{ respectively})\) and as such, is more susceptible to extreme responses influencing the results. Furthermore, most likely due to the small amount of participants, the homogeneity of variance for this result was also significant \((F = 10.56, p = .003)\) when examining differences between compensation method, indicating that the variances were not normally distributed. Therefore, I decided to examine whether there was still a difference in compensation method when comparing all participants from the university alumni network sample \((n = 33)\) and participants from Amazon’s Mechanical Turk \((n = 160)\). There was no significant difference between university alumni network participants and Mechanical Turk participants on organizational identification \((t (191) = 1.59, p = .11)\), occupational identification \((t (191) = 1.07, p = .28)\), moral disengagement \((t (36.69) = 1.14, p = .26)\), social desirability \((t (59.99) = 1.68, p = .09)\), honesty-humility \((t (55.65) = -1.24, p = .22)\), the developed UPB decision-making scenarios \((t (191) = -1.15, p = .25)\), or the general UPB scale \((t (191) = -0.16, p = .87)\). Therefore, I chose to analyze participants from both recruitment methods as one sample but caution researchers to consider the difference in compensation method in the university alumni recruitment method noted above.

A series of t-tests was also conducted to determine whether country of origin, Canada or the United States, would result in significant differences on any given variable.
There was no significant difference between country of origin for organizational identification ($t(190) = 1.12, p = .26$), occupational identification ($t(190) = 0.49, p = .62$), moral disengagement ($t(190) = 0.30, p = .76$), social desirability ($t(51.47) = 1.12, p = .26$), honesty-humility ($t(190) = 0.14, p = .89$), the developed UPB decision-making scenarios ($t(190) = -1.63, p = .10$), or the general UPB scale ($t(190) = -0.59, p = .55$).

Next, I examined whether gender of participants would result in significant differences on any of our study’s variables. Since only one individual selected the ‘other’ gender option, they were excluded from the analysis and the present study analyzed gender differences utilizing male ($n = 96$) and female ($n = 96$). Results indicated that there were significant gender differences on moral disengagement ($t(190) = -0.12, p < .001$), honesty-humility ($t(190) = -3.55, p < .001$), the developed UPB decision making scenarios ($t(183.22) = 2.21, p = .02$), and the general UPB scale ($t(190) = 2.58, p = .01$). Males were significantly more likely to engage in moral disengagement ($M = 2.54, SD = 1.26$) than females ($M = 1.94, SD = 0.77$). Females were significantly higher on the honesty-humility personality trait ($M = 3.67, SD = 0.67$) than males ($M = 3.34, SD = 0.60$). Males were also more likely to engage in UPB within the decision-making scenarios ($M = 3.09, SD = 1.34$) than females ($M = 2.69, SD = 1.11$) and males were also more likely to engage in UPB according to the general UPB scale ($M = 2.76, SD = 1.31$) than females ($M = 2.30, SD = 1.16$). Therefore, gender of the participants was included in the model as a covariate to control for the influence of gender.

As stated above, after participants were debriefed, a manipulation question was included on whether the participants were aware that the study was investigating ethical decision making. Overall, 97 participants indicated that they were aware that the study was investigating ethical decision making, 94 participants indicated that they were not aware, and 2 participants did not respond. To ensure that this did not impact the study, a series of t-tests was conducted to determine whether this awareness was related to significant differences on our study’s variables. The scores on the developed measure of UPB ($t(189) = 0.83, p = .40$) and the UPB scale ($t(189) = 1.33, p = .18$) were not significantly different based upon whether or not the participant was aware of the study’s purpose, however, moral disengagement scores were significantly different between these
groups ($t(189) = 2.28, p = .02$). Participants who were aware that the study was on ethical decision making had a higher average on moral disengagement ($M = 2.42, SD = 1.16$) than participants who were not aware that the study was on ethical decision making ($M = 2.07, SD = 0.97$). All other variables were unaffected by participant’s awareness of the study’s purpose. Due to the awareness of the study’s hypothesis not significantly impacting the actual decision making in the study (i.e., our UPB measure), I decided to continue my analysis with the full sample but again caution interpretation of the results.

**UPB Decision-Making Scenario Measurement Properties**

Prior to testing my hypotheses, I examined whether the UPB decision-making scenarios was related to the existing UPB scale (Umphress et al., 2010) and adequately loaded onto a one factor solution as the original UPB measure was intended to do. The UPB decision-making scenarios had a significant and large correlation with the UPB scale ($r = .65, p < .001$), indicating that the developed UPB measure shared 42.25% of variance with the UPB scale. When the six UPB decision-making scenarios were entered into an exploratory factor analysis, it returned a one factor solution based on eigenvalues greater than 1 as a cut-off value. This one factor solution explained 47.70% of variance in the developed UPB scenarios. All the UPB decision-making scenarios had relatively high loadings, with no complex loadings found (e.g., below .40; see Table 2). Furthermore, the one factor model had good fit indices, $\chi^2 = 16.80, p = .053$, TLI = .967, RMSEA = .069, RMSEA 90% CI [.00, .12], and, as expected, was a unique factor when compared to the developed OCB-O decision-making scenarios (2 factor solution of OCB-O and UPB: $\chi^2 = 42.00, p = .164$, TLI = .975, RMSEA = .038, RMSEA 90% CI [.00, .07]; see Table 2 for factor loadings based on the pattern coefficient matrix). Therefore, the developed UPB decision-making scenarios had adequate measurement properties, but did not share as much variance with the general UPB scale as expected.
Table 2

*Exploratory Factor Analysis Loadings for the Unethical Pro-Organizational Behaviour and Organizational Citizenship Behaviour Decision-Making Scenarios*

<table>
<thead>
<tr>
<th>Items</th>
<th>Factor 1 (UPB)</th>
<th>Factor 2 (OCB)</th>
</tr>
</thead>
<tbody>
<tr>
<td>UPB 1</td>
<td>.50</td>
<td></td>
</tr>
<tr>
<td>UPB 2</td>
<td>.71</td>
<td>.46</td>
</tr>
<tr>
<td>UPB 3</td>
<td>.70</td>
<td>.67</td>
</tr>
<tr>
<td>UPB 4</td>
<td>.66</td>
<td>.60</td>
</tr>
<tr>
<td>UPB 5</td>
<td>.82</td>
<td>.59</td>
</tr>
<tr>
<td>UPB 6</td>
<td>.67</td>
<td>.51</td>
</tr>
<tr>
<td>OCB 1</td>
<td></td>
<td>.67</td>
</tr>
<tr>
<td>OCB 2</td>
<td>.67</td>
<td>.60</td>
</tr>
<tr>
<td>OCB 3</td>
<td>.51</td>
<td></td>
</tr>
<tr>
<td>OCB 4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>OCB 5</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Note.* UPB = Unethical Pro-Organizational Behaviour, OCB = Organizational Citizenship Behaviour.

**Hypotheses Testing with UPB Decision-Making Scenarios**

To my hypotheses, a regression analysis was conducted utilizing model 5 within the Hayes process macro (Hayes, 2018) in the 25th version of the Statistical Package for the Social Sciences (SPSS). The overall regression analysis significantly predicted 38% of variance in the unethical pro-organizational behaviour measure, $R = .62$, $R^2 = .38$, $F (7, 185) = 16.37$, $SE = 0.99$, $p < .001$ (see Table 3 for zero-order correlations and coefficient alphas). All confidence intervals reported below were conducted with a bootstrapped analysis, utilizing 5000 samples with 95% confidence intervals.
Table 3

*Descriptive Statistics and Zero-Order Correlation Matrix*

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>SD</th>
<th>OrgID</th>
<th>OccID</th>
<th>MD</th>
<th>UPB</th>
<th>UPB-U</th>
<th>HH</th>
<th>SD</th>
<th>Gender</th>
</tr>
</thead>
<tbody>
<tr>
<td>OrgID</td>
<td>3.66</td>
<td>0.64</td>
<td>(.87)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>OccID</td>
<td>3.61</td>
<td>0.60</td>
<td>.64***</td>
<td>(.84)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MD</td>
<td>2.24</td>
<td>1.08</td>
<td>-.25***</td>
<td>-.21**</td>
<td>(.91)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>UPB</td>
<td>2.90</td>
<td>1.24</td>
<td>-.19**</td>
<td>-.16*</td>
<td>.57***</td>
<td>(.83)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>UPB-U</td>
<td>2.53</td>
<td>1.26</td>
<td>-.21**</td>
<td>-.19**</td>
<td>.65***</td>
<td>.65***</td>
<td>(.84)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HH</td>
<td>3.50</td>
<td>0.65</td>
<td>.10</td>
<td>.11</td>
<td>-.56***</td>
<td>-.47***</td>
<td>-.52***</td>
<td>(.74)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SD</td>
<td>1.52</td>
<td>0.26</td>
<td>.29***</td>
<td>.31***</td>
<td>-.31***</td>
<td>-.11</td>
<td>-.27***</td>
<td>.42***</td>
<td>(.80)</td>
<td></td>
</tr>
<tr>
<td>Gender</td>
<td>1.51</td>
<td>0.51</td>
<td>.02</td>
<td>.02</td>
<td>-.29***</td>
<td>-.14</td>
<td>-.19**</td>
<td>.23**</td>
<td>.02</td>
<td>N/A</td>
</tr>
</tbody>
</table>

*Note.* UPB = Unethical Pro-Organizational Behaviour, UPB-U = Unethical Pro-Organizational Behaviour scale (Umphress et al., 2010), HH = Honesty-Humility, SD = Social Desirability, N/A = Not Applicable. Coefficient alphas are given in parenthesis on the diagonal.

* *p < .05 level (2-tailed), ** p < .01 level (2-tailed), *** p < .001 level (2-tailed)*

In terms the relationships between the control variables and the mediator, moral disengagement, it was found that gender was significantly negatively related to moral disengagement, \( b = -0.34, SE = 0.10, t(191) = -2.74, p = .007, CI[-0.59, -0.97] \). Recall that this variables’ coding indicates that males were significantly more likely to engage in moral disengagement. Honesty-humility was significantly negatively related to engaging in moral disengagement, \( b = -0.81, SE = 0.11, t(191) = -7.46, p < .001, CI[-1.02, -0.59] \). Lastly, social desirability was negatively related to engaging in moral disengagement, however, the relationship was not significant, \( b = -0.21, SE = 0.28, t(191) = -0.75, p = .45, CI[-0.75, 0.34] \).
In terms of the relationship between the control variables and the dependent measure, the results indicated that gender was positively related to engaging in UPB within the decision-making scenarios, however, the effect was not significant, $b = 0.13$, $SE = 0.15$, $t(191) = 0.89$, $p = .37$, CI[-0.16, 0.43]. This directionality is contrary to the earlier results. This can be attributed to the other variables that were added to the regression equation (e.g., moral disengagement; see Table 4 for step-wise hierarchical regression analysis). Next, I found that honesty-humility was significantly negatively related to engaging in UPB within the decision-making scenarios, $b = -0.57$, $SE = 0.14$, $t(191) = -3.98$, $p < .001$, CI[-0.85, -0.29]. Furthermore, I found that social desirability was also significantly positively related to engaging in UPB within our decision-making scenarios, $b = 0.90$, $SE = 0.33$, $t(191) = 2.77$, $p = .006$, CI[0.26, 1.54].

**Table 4**

*Hierarchical Regression Analysis of Unethical Pro-Organizational Behaviour*

<table>
<thead>
<tr>
<th>Variables</th>
<th>Model 1</th>
<th>Model 2</th>
<th>Model 3</th>
<th>Model 4</th>
<th>Model 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>HH</td>
<td>-0.96***</td>
<td>-0.97***</td>
<td>-0.97***</td>
<td>-0.56***</td>
<td>-0.57***</td>
</tr>
<tr>
<td>SD</td>
<td>0.48</td>
<td>0.34</td>
<td>0.74*</td>
<td>0.78*</td>
<td>0.88**</td>
</tr>
<tr>
<td>Gender</td>
<td>-0.06</td>
<td>0.16</td>
<td>-0.05</td>
<td>0.16</td>
<td>0.12</td>
</tr>
<tr>
<td>OrgID</td>
<td>-0.36**</td>
<td>0.16</td>
<td>-0.29</td>
<td>0.16</td>
<td>-0.15</td>
</tr>
<tr>
<td>OccID</td>
<td></td>
<td>-0.12</td>
<td>0.17</td>
<td>-0.09</td>
<td>0.16</td>
</tr>
<tr>
<td>MD</td>
<td></td>
<td>0.51***</td>
<td>0.08</td>
<td>0.51***</td>
<td>0.09</td>
</tr>
<tr>
<td>Interact.</td>
<td></td>
<td>-0.11</td>
<td>0.15</td>
<td></td>
<td></td>
</tr>
<tr>
<td>$F$</td>
<td>18.51</td>
<td>16.34</td>
<td>13.12</td>
<td>19.05</td>
<td>16.37</td>
</tr>
<tr>
<td>$R^2$</td>
<td>0.23</td>
<td>0.26</td>
<td>0.26</td>
<td>0.38</td>
<td>0.38</td>
</tr>
<tr>
<td>$R^2\Delta$</td>
<td>.23***</td>
<td>.03**</td>
<td>.002</td>
<td>.12***</td>
<td>.002</td>
</tr>
</tbody>
</table>

*Note. HH = Honesty-Humility, SD = Social Desirability, OrgID = Organizational Identification, OccID = Occupational Identification, MD = Moral Disengagement, Interact. = Interaction of Occupational Identification and Organizational Identification.*

* $p < .05$ level (2-tailed), ** $p < .01$ level (2-tailed), *** $p < .001$ level (2-tailed)
Contrary to hypothesis 1, the regression analysis suggested a negative relationship between organizational identification ($M = 3.66, SD = 0.64$) and unethical pro-organizational behaviour ($M = 2.90, SD = 1.24$) such that individuals who were higher in organizational identification were less likely to engage in unethical pro-organizational behaviour (see Figure 3), however, this effect was not significant, $b = -0.16, SE = 0.15$, $t(191) = -1.08, p = .28$, CI[-0.46, 0.13] and hypothesis 1 was not supported. In examining hypothesis 2, occupational identification ($M = 3.61, SD = 0.60$) was negatively related to unethical pro-organizational behaviour, however this failed to reach significance, $b = -0.09, SE = 0.16, t(191) = -0.56, p = .57$, CI[-0.39, 0.22]; therefore hypothesis 2 was not supported.

![Conditional direct effect: (b = -0.15)](image)

**Figure 3.** Tested model with unstandardized beta coefficients shown.

To analyze hypothesis 3, which stipulated that the relationship between organizational identification and unethical pro-organizational behaviour is significantly mediated by moral disengagement, the Hayes (2018) process macro with bootstrapped confidence intervals was utilized. The regression analysis indicated that moral disengagement ($M = 2.24, SD = 1.08$) significantly mediated the relationship between organizational identification and unethical pro-organizational behaviour, $b = -0.16, SE = 0.05$, CI[-.26, -.07], however, I was expecting a positive mediation effect. More specifically, I anticipated that organizational identification would be significantly
positively related to moral disengagement, whereas I found that organizational identification was significantly negatively related to moral disengagement ($b = -0.31$, $SE = 0.10$, $t(191) = -3.08$, $p = .002$, CI[-.51, -.11]). As expected, moral disengagement did significantly positively predict unethical pro-organizational behaviour, $b = 0.50$, $SE = 0.08$, $t(191) = 5.96$, $p < .001$, CI[.34, .67]. While the mediation result was significant, I was unable to support hypothesis 3 due to directionality being counter to expectations.

Hypothesis 4 stipulated that occupational identification would significantly negatively moderate the relationship between organizational identification and unethical pro-organizational behaviour. This hypothesis was not supported. The effect of organizational identification on unethical pro-organizational behaviour was not significantly dependent on the value of occupational identification, $b = -0.11$, $SE = 0.15$, $t(191) = -0.76$, $p = .44$, with the interaction predicting less than 1 percent of variance in unethical pro-organizational behaviour ($R^2\Delta = .002$).

Hypotheses Testing Utilizing General UPB Scale

While the main hypotheses testing of my study utilized the UPB decision-making scenarios, it was also important to conduct a parallel analysis with the general UPB scale (Umphress et al., 2010) to understand whether the UPB decision-making scenarios were functioning as intended. The overall regression analysis significantly predicted 46% of variance in the unethical pro-organizational behaviour measure, $R = .68$, $R^2 = .46$, $F(7, 185) = 22.88$, $SE = 0.88$, $p < .001$.

Similarly to the UPB decision-making scenarios, results indicated that gender, $b = -0.34$, $SE = 0.13$, $t(191) = -2.74$, $p = .007$, CI[-0.59, -0.96], and honest-humility, $b = -0.81$, $SE = 0.11$, $t(191) = -7.46$, $p < .001$, CI[-1.02, -0.59], were significantly negatively related to moral disengagement and social desirability was negatively related, but not significant, $b = -0.21$, $SE = 0.28$, $t(191) = -0.75$, $p = .45$, CI [-0.75, 0.34].

In terms of the relationship between the control variables and the general UPB scale, the study found similar results to the UPB-decision making scenarios in that gender was positively related to engaging in general UPB ($M = 2.52$, $SD = 1.26$), however, the effect was not significant, $b = 0.02$, $SE = 0.14$, $t(191) = 0.15$, $p = .88$, CI[-0.25, 0.30].
Furthermore, it was found that honesty-humility was again significantly negatively related to engaging in general UPB, $b = -0.47$, $SE = 0.13$, $t(191) = -3.48$, $p < .001$, CI[-0.73, -0.20] and social desirability was significantly positively related to engaging in general UPB, $b = 0.90$, $SE = 0.33$, $t(191) = 2.77$, $p = .006$, CI[0.26, 1.54].

Similarly to the developed UPB decision-making scenarios, I found that organizational identification was negatively related to engaging in general UPB and not significant, thus not supporting hypothesis 1, $b = -0.09$, $SE = 0.14$, $t(191) = -0.64$, $p = .52$, CI[-0.37, 0.19]. Similarly to the examination of hypothesis 2 in the decision-making scenarios, results indicated that occupational identification was negatively related to the engaging in general UPB, however, this effect again failed to reach significance, $b = -0.09$, $SE = 0.15$, $t(191) = -0.61$, $p = .54$, CI[-0.38, 0.20].

With regard to hypothesis 3, the results again found that moral disengagement significantly mediated the relationship between organizational identification and general UPB, $b = -0.18$, $SE = 0.06$, CI[-0.31, -0.07], but not as predicted. Organizational identification was again significantly negatively related to engaging in moral disengagement, $b = -0.31$, $SE = 0.10$, $t(191) = -3.08$, $p = .002$, CI[-0.51, -0.11], and moral disengagement was significantly positively related to engaging in general UPB ($b = 0.57$, $SE = 0.08$, $t(191) = 7.17$, $p < .001$, CI[0.41, 0.73]). Due to the unexpected directionality of the mediation, I was also unable to support hypothesis 3 utilizing the general UPB scale.

Lastly, I examined whether occupational identification would moderate the relationship between organizational identification and the general UPB. Similar to previous results, this hypothesis was not supported; the effect of organizational identification on unethical pro-organizational behaviour was not significantly dependent on the value of occupational identification, $b = -0.23$, $SE = 0.14$, $t(191) = -1.69$, $p = .09$. The addition of the interaction to the regression equation only changed the predicted variance in the general UPB measure by less than 1 percent.

**Discussion**

While a majority of the literature on UPB has touted the importance of identification as an antecedent to committing UPB, I found mixed results; some fitting
with past research and some that are seemingly at odds. Umphress et al. (2010) originally hypothesized that organizational identification would be significantly positively related to UPB, based upon the theoretical assumption that someone who bases their self-concept on an organization also internalizes the successes or failures of said organization (Ashforth & Mael, 1989). I found no such association between organizational identification and UPB, instead, results indicated a non-significant negative relationship. This non-significant finding fits with previous research findings (e.g., Umphress et al., 2010), however, there are also research articles that have found a significant relationship between identification and forms of UPB (e.g., Chen et al., 2016, Effelsberg & Solga, 2015; Chen et al., 2016; Johnson & Umphress, 2018). A closer examination of the analysis conducted reveals that organizational identification is significantly related to UPB after the control variables are entered in the regression analysis, but is no longer significant with the addition of occupational identification to the analysis (see Table 4). This could indicate that previous research has failed to incorporate a more holistic view of an individual’s workplace identification, which is potentially why the results failed to find a significant effect.

In terms of the directionality, all previous research on organizational identification and UPB have found a positive relationship between organizational identification and various examinations of UPB (e.g., Chen et al., 2016; Effelsberg, Solga, & Gurt, 2014; Johnson & Umphress, 2018). I believe that this negative relationship was found partly due to failing to take the context of our participants into account, the specific sample utilized, and the specific examination of UPB through the decision-making scenarios. In terms of context, there is convincing research that context can significantly change the strength of the relationship between workplace attitudes and outcomes - for instance, if your organization has the same values as your occupation/profession, you are more likely to be committed to the organization (Lee et al., 2000). In identification literature, research has found that perceiving your workplace identifications as similar (e.g., my organization is similar to my team) leads to a strengthened relationship between the respective identifications (Marique et al., 2014). Relating back to my findings, if participants perceived that their organization is similar to their occupation/profession, they may not see a large difference between the two. If this is
true, participants would be less likely to unethically help their organization, mainly because their organization has similar ethical values to the occupation (i.e., following codes of conduct set forth by the occupation). While previous literature on UPB utilized undergraduate or general Mechanical Turk participants (e.g., Chen et al., 2016; Umphress et al., 2010), I chose to utilize a specific occupation of accountants. This change in targeted sample and UPB measurement approach may have resulted in a different result than previous research. Accounting participants may view any activities that would be classified as UPB as an unnecessary risk to the organization, especially given the context of the accounting UPB decision making scenarios. For instance, if an accountant committed UPB with regard to the organization’s financial statements, this may have led to future financial and reputational penalties for the organization. Relating back to social identity theory’s propositions, accountants may not commit UPB to make their group more positively distinct (Tajfel & Turner, 1979), mainly because committing UPB will not achieve that for the organization. Accountants may be especially aware of this in the wake of the 21st century accounting scandals, such as Enron, where unethical accounting practices lead to the destruction of the organization (Campbell et al., 2016). Therefore, individuals who highly define themselves on their organization may be making their group more positively distinct by resisting engaging in UPB – they do not want to leave their organization open to risk via lawsuits or government audits.

Another thing to consider is whether accountants also experience higher accountability for their work than a typical employee. If a financial statement is found to contain multiple instances of unethical entries, these can be traced back to the accountant who was responsible for those entries. This regular accountability within an accountant’s day to day work regiment may make accountants particularly averse to engaging in UPB, thus why a negative relationship for committing UPB was found.

In terms of occupational identification, a negative relationship between occupational identification and UPB was found, however, this did not reach significant levels. Furthermore, I found that occupational identification did have the appropriate directionality when interacting with organizational identification (e.g., higher occupational identification resulted in less UPB), however, this also failed to reach
significant levels. While previous studies had not yet investigated whether occupational identification was significantly related to various forms of UPB, a select few studies examined occupational identity in moral decision making (e.g., Leavitt et al., 2012; Lai et al., 2013) and examined moral identity as a potential moderator to unethical behaviour (e.g., Johnson & Umphress, 2018; Wang, Long, Zhang, & He, 2018). Similarly to my results, the select few studies on occupational and moral identity in the moral decision-making context indicated that these identities were negatively related to engaging in unethical behaviour (e.g., Lai et al., 2013; John & Umphress, 2018). As stated earlier, accounting as a profession is keenly aware of serious issues that have risen from committing unethical behaviour (Campbell et al., 2016), have specific codes of conduct (e.g., IFRS), and have accounting professionals who advocate for ethical reforms (Gillis et al., 2014; Botzem, 2014). Turning to a theoretical explanation of the findings, I anticipated that individuals with a strong occupational identity would be less likely to commit these unethical behaviours based upon the assumption that you would be less likely to commit unethical acts to make only one of your social groupings positively distinct and would engage in behaviours congruent with an occupational code of conduct (Tajfel & Turner, 1979; Ashforth & Mael, 1989). This is especially true given that occupational identities may serve as a basis for moral decision making (e.g., Leavitt et al., 2012) and occupational regulations typically guide professional practice (e.g., Campbell et al., 2016). Therefore, the results do fit with related literature (e.g., Wang et al., 2018; Johnson & Umphress, 2018) in terms of directionality, but did not predict significant variance in unethical behaviour as past research had found. Therefore, workplace identification alone may not have as significant an impact on engaging in UPB as thought by previous research (e.g., Umphress et al., 2010).

In terms of the mediating effect of moral disengagement, the results coincided with multiple previous findings that moral disengagement is a strong predictor of engaging in unethical behaviour (Chen et al., 2016; Moore et al., 2008; Stanger et al., 2013) and a strong mediator within the theoretical model of UPB (Umphress and Bingham, 2011). However, I did find conflicting results regarding the direction of moral disengagement in the model. While I found a significant negative mediating effect of moral disengagement on UPB, previous research has found a positive mediating effect of
moral disengagement (Chen et al., 2016). More specifically, the results indicated that organizational identification was significantly negatively related to engaging in moral disengagement, whereas past research and theory indicated a positive significant effect. As stated earlier, this means that individuals who were higher in organizational identification were less likely to engage in moral disengagement, and thus less likely to engage in UPB. However, researchers should exercise caution in understanding the relationship between organizational identification and moral disengagement as being positively or negatively related – to date there are only two other studies that have investigated the relationship between these two variables (Chen et al., 2016; Lee, Schwarz, Newman, & Legood, 2019). Theory follows that these two constructs should be positively related - individuals who are members of a larger social grouping should engage in higher rates of moral disengagement due to the anonymity that a large group can provide (Chen et al., 2016). Furthermore, if an individual does help their group become more positively distinct through the engagement of unethical behaviour, moral disengagement is a process that would alleviate the potential negative emotional states an individual would experience by breaking moral codes (Detert et al., 2008). Even within Umphress and Bingham’s (2011) theoretical nomological network of UPB, one of the key propositions is that identification lays the foundation for neutralizing cognitive processes, such as moral disengagement, to occur. In the present study, I did not find support for this theoretical argument, however, the results of moral disengagement can be explained in the same light as the findings for identification being negatively related to UPB. First and foremost, if accountants who are highly identified with their organization are less likely to engage in unethical behaviour, logic follows that these same individuals would be less likely to engage in an antecedent of unethical behaviour (i.e., moral disengagement). Furthermore, due to accountants being a highly professionalized group, who are aware of the detrimental impact of committing unethical actions, they may be less likely to engage in cognitive distortions when it comes to workplace decision-making. These accountants may also realize the true impact of engaging in cognitive suppression and unethical behavior – a detrimental outcome for their organization.

By administering both the study’s developed UPB decision-making scenarios and the UPB scale (Umphress et al., 2010) to participants, I was able to compare whether the
UPB decision-making scenario functioned differently than the general UPB scale. Importantly, the hypotheses results did not change between utilizing the UPB decision-making scenarios or the UPB scale as the dependent measure. While further examination of general versus specific UPB remains to be conducted, I did find that UPB can be utilized within a decision-making scenario context with high levels of internal validity and a nomological network that is similar to that of the general UPB measure. However, I stress the importance of developing the UPB decision-making scenarios through semi-structured interviews with experts and providing ample materials from the original UPB conceptualization (Umphress et al., 2010).

Limitations

The study had a few notable limitations. First, the sample size may be inadequate given the complexity of the analysis. In total, there were seven predictors of UPB, with one of those predictors being an interaction. This made it more difficult for the regression coefficients to achieve appropriate statistical power. For example, to reach a recommended power coefficient of .80 (Cohen, 1988) for the interaction’s obtained effect size, I would require a total sample size of 2611 individuals. While any study could utilize more participants, it was a particular limitation when it came to my model’s number of predictions.

Another potential limitation of my study is the measurement of identification. I chose to utilize the Ashforth & Mael (1989) workplace identification scale while utilizing replacement words to measure occupational and organizational identification. While this has been done in previous research (e.g., Johnson et al., 2006), it may lead to a higher correlation between organizational and occupational identification that is not necessarily indicating the true correlation between the constructs. Within the study procedures, a random survey presentation process was utilized, meaning that certain participants would have gotten both identification scales back to back with only one word replaced on each item. With this being said, there are other occupational identification scales that contain occupation specific item wording (e.g., “I would rather belong to another occupational group”; van Dick & Wagner, 2002) that could have been utilized to avoid participant
confusion. Related to this, there are also many different ways to conceptualize identification, including a generalized one factor measurement (e.g., Ashforth & Mael, 1989), identification split into affective and cognitive components (e.g., van Dick & Wagner, 2002), or more recently, general identification with the addition of three factors measuring negative or ambivalent identification (disidentification, ambivalent, and neutral; Kreiner & Ashforth, 2004). Kreiner and Ashforth have shown that these other types of identification have significant relationships with other variables, such as intrarole conflict, psychological contract breach, affectivity, and cynicism, explaining variance above the typical one factor measurement of identification. While there is no previous research on UPB utilizing a multi-component measurement of identification, I feel that the true nature of the relationship between identification and UPB may have changed if a more holistic measure of identification was utilized. For instance, there is research suggesting that morally compromising work results in higher dis-identification, where an individual distances themselves from their workplace or occupational identification (Lai et al., 2013). Relating back to my results, there may have been a significant relationship between dis-identification and UPB, however, we only utilized the one factor model of identification (e.g., Mael & Ashforth, 1992).

While I tried to incorporate the study with a sufficient amount of deception, a majority of participants were aware that the study was about ethical decision making. While there was no significant difference between individuals who said they were aware and those who said they were not aware on my UPB measure, there is still the real possibility that all participants were at least somewhat aware of the study’s hypotheses, and thus answered differently. This may especially be true in the context of the recruitment through Amazon’s Mechanical Turk. Requesters, or researchers, have the option to reject individuals who do not adequately fill out their survey. Therefore, participants may have said they did not know the study’s main topic out of fear of being rejected, which results in no payment received and a lower report on their Mechanical Turk account. Therefore, the UPB results may have been negatively skewed due to a vast majority of participants knowing the study was on ethical decision-making, thus making it harder to predict.
Another potential limitation was the development of the UPB decision-making scenarios. While the scenarios were developed through interviews with experts in the accounting field, I was only able to interview a small group of experts to develop and rate the scenarios. Therefore, I am unable to say that the UPB decision-making scenarios are truly representative of UPB within accounting without interviewing a larger sample of accounting experts. Furthermore, it may have been more representative of the study to interview accounting experts from the United States given that most of the participants were based within the United States. While no significant difference was found in terms of country of origin on any of our study variables, interviewing United States-based experts may have led to developing scenarios more representative of the accounting context of the United States, resulting in more accurate UPB predictions.

**Future Directions**

Due to the recent development of UPB as a construct (Umphress et al., 2010), there are a multitude of research avenues to be investigated. In terms of the relationship between identification and UPB, future research could look at investigating organizational and occupational identification from a multi-factor perspective (Kreiner & Ashforth, 2004) to determine whether other types of identification may significantly relate to UPB. Of particular interest is ambivalent identification, where an individual has mixed feelings about their identification source, for instance, having both pride and embarrassment for being a part of their organization. Based upon social identity theory (Tajfel & Turner, 1979), these individuals may seek to make their organization positively distinct by committing UPB or refrain from engaging in UPB and further dis-identifying with the organization.

Another interesting avenue of research is the personality determinants of engaging in UPB. While emergent research has begun to investigate personality in relation to UPB (e.g., Effelsberg et al., 2014), the literature lacks a holistic understanding of how multiple personality traits relate to engaging in UPB. In my study, I found honesty-humility, a personality facet of the HEXACO (Ashton & Lee, 2009), predicted more variance than that explained by organizational and occupational identification combined. Therefore,
there is a promising future research direction in understanding how a full spectrum of personality would predict engagement of UPB, for instance, whether an individual is highly conscientious and honest.

As well, future research could investigate how the organizational context of the participant may influence the relationship between multiple workplace identifications and UPB. This becomes especially pertinent due to past research revealing that value congruence between identities results in higher overall identification (Marique et al., 2014). While I tried to incorporate context within the UPB decision-making scenarios, I failed to incorporate the participant’s organizational context in the methodology of the study. Past research has indicated that the context of individuals does change the strength of the relationship between workplace attitudes and multiple outcomes (e.g., Lee et al., 2000; Marique et al., 2014; Marstand et al., 2018). For instance, there is a large discrepancy between individuals who feel that their organization’s values match their occupation’s. Relating back to my study, accountants work in a variety of industries and contexts, from accounting firms with hundreds of accountants to companies with a single in-house accountant. Therefore, accountants in my sample may work in a variety of contexts and experience difference levels of congruence between the organization and their occupation (e.g., a construction company employing a single accountant would have a different set of organizational values than an accounting firm whose sole focus is accounting). Therefore, organizational context might impact the way that workers engage in UPB.

Lastly, I believe there is another fruitful area of future research into how individuals distort their cognitions to validate engaging in UPB. As stated above, Umphress and Bingham’s (2011) theoretical model included neutralization, a cognitive process where engaging in morally or unethically desirable behaviour is masked from self-blame or experiencing negative emotional states, as the primary mediator between identification and committing UPB. In my study, it was found that moral disengagement, a type of neutralization, was the strongest predictor of engaging in UPB. Cognitive mechanisms that encourage individuals to engage in UPB or avoid the anticipated guilt of engaging in UPB have been found in a few studies on UPB (e.g., Chen et al., 2016),
however, these examinations are not exhaustive. For instance, it has been found that these neutralizing cognitions significantly predict UPB, but the antecedents for neutralization, or in what instances it may be more likely to occur within the context of the UPB model are largely left unexplored (Umphress & Bingham, 2011). This is especially true given the results of my study; I found a change in the directionality from all previous research on organizational identification and moral disengagement. This may indicate that there are certain moderating variables that influence whether participants engage in UPB.

There is also a future research avenue examining UPB in decision-making studies in various occupations. This would help the UPB literature understand whether UPB’s theoretical model (Umphress & Bingham, 2011) is largely influenced by occupation specific examinations.

**Conclusion**

While classifying oneself as a member of an organization has been researched as a positive experience for both the individual and the organization (e.g., Riketta, 2005; Steffens et al., 2017), recent investigations have questioned whether the dark side of identification rests with committing unethical behaviour (Conroy et al., 2017; Umphress et al., 2010). This research adds an important piece of the puzzle in understanding whether multiple identifications can serve as a basis for engaging in unethical behaviour. While I found no basis that identification has a direct significant positive effect on UPB, results did indicate that identification exerts an influence on UPB through the mediation of a neutralizing cognitive mechanism as past theorized in the UPB model set forth by Umphress and Bingham (2011). Furthermore, I found that higher rates of occupational identification did result in less engagement of UPB, however, this effect was not significant. I encourage future research to further investigate the role of occupational identification and other multi-factor identification approaches to fully understand the role of identification in committing UPB.
References


doi:http://dx.doi.org.proxy1.lib.uwo.ca/10.1037/apl0000111


doi:http://dx.doi.org.proxy1.lib.uwo.ca/10.5465/amj.2014.1040

doi:http://dx.doi.org.proxy1.lib.uwo.ca/10.1037/h0047358


Effelsberg, D., Solga, M., & Gurt, J. (2014). Transformational leadership and follower’s unethical behavior for the benefit of the company: A two-study
investigation. *Journal of Business Ethics, 120*(1), 81-93.


doi:http://dx.doi.org.proxy1.lib.uwo.ca/10.1080/00224540109600558


doi:http://dx.doi.org.proxy1.lib.uwo.ca/10.3200/SOC.P.146.6.701-716


doi:http://dx.doi.org.proxy1.lib.uwo.ca/10.1037/0021-9010.91.2.498


doi:http://dx.doi.org/10.2307/258867

doi:http://dx.doi.org.proxy1.lib.uwo.ca/10.1002/job.234

doi:http://dx.doi.org/10.1287/orsc.1060.0208


doi:http://dx.doi.org.proxy1.lib.uwo.ca/10.1002/smi.2421


doi:http://dx.doi.org/10.1111/j.1744-6570.2011.01237.x


doi:http://dx.doi.org.proxy1.lib.uwo.ca/10.1080/09639284.2014.947092


doi:http://dx.doi.org.proxy1.lib.uwo.ca/10.1177/0018726715626255


doi:http://dx.doi.org.proxy1.lib.uwo.ca/10.1002/job.536


doi:http://dx.doi.org.proxy1.lib.uwo.ca/10.1108/EUM0000000005650


doi:http://dx.doi.org.proxy1.lib.uwo.ca/10.1177/0893318912469770


doi:http://dx.doi.org.proxy1.lib.uwo.ca/10.1016/j.jvb.2004.05.005


doi:http://dx.doi.org.proxy1.lib.uwo.ca/10.1287/orsc.1100.0559


doi:http://dx.doi.org.proxy1.lib.uwo.ca/10.1037/a0019214

doi:http://dx.doi.org.proxy1.lib.uwo.ca/10.1111/j.1467-8551.2004.00424.x

doi:http://dx.doi.org.proxy1.lib.uwo.ca/10.1080/13594320143000889

doi:http://dx.doi.org.proxy1.lib.uwo.ca/10.1348/096317904774202135

doi:http://dx.doi.org.proxy1.lib.uwo.ca/10.1207/s15327043hup1802_3


Appendix A

Workplace Identification Measure (Mael & Ashforth, 1992)

12 items are measured on a 5-point Likert scale of 1 (strongly disagree) to 5 (strongly agree).

1. I identify myself as a member of my [organization/occupation].
2. Being a member of my [organization/occupation] reflects my personality well.
3. I like to work for my [organization/occupation].
4. I think reluctantly of my [organization/occupation]. (R)
5. Sometimes I rather don’t say that I’m a member of my [organization/occupation]. (R)
6. I am actively involved in my [organization/occupation].
7. When someone criticizes my [organization/occupation], it feels like a personal insult.
8. When I talk about my [organization/occupation], I usually say ‘we’ rather than ‘they’.
9. I am interested in what others think of the [organization/occupation] I work for.
10. I view the the [organization/occupation]’s successes as my successes.
11. When someone praises my [organization/occupation], it feels like a personal compliment.
12. If a story in the media criticized my [organization/occupation], I would feel embarrassed.
Appendix B

Unethical Pro-Organizational Behaviour Decision Making Scenarios

10 decision-making scenarios measured on a 7-point Likert scale of 1 (*Very Unlikely*) to 7 (*Very Likely*). * Indicates that the scenario was utilized in the final six UPB decision-making scenarios.

1. You are finalizing some of your tax documents for the upcoming tax season and your organization is owing a moderate amount of money. You are looking through your records and notice that your organization bought a new machine on December 27th. You are considering claiming capital cost allowance (or tax depreciation) on the machine for the year it was bought, however, you know the production team did not actually receive the machine until January of the following year.
   How likely are you to claim depreciation on the machine in the fiscal year it was bought? *

2. Your organization has just set up a new machine and you are now faced with expensing the costs. The machine company’s experts claim that the machine will most likely only last 4 years, but you are considering risking it and expensing it over 8 years. This would allow your company to show more income in your next financial report to the bank. If the bank sees the income is too low, it may put your organization’s loan at risk.
   How likely are you to expense the machine over 8 years?

3. Next week your quarterly financial statements are due. Your organization has a loan with a national bank, and stipulated within your covenant is the requirement for your organization to earn 20 cents a share every quarter. You completed your financial statements and felt that they were pretty accurate, however, your organization has only earned 17 cents a share this last quarter. This puts your company’s loan in risk of being immediately called. You start to consider changing your previous accruals to allow your financial statements to show more income and earnings per share.
   How likely are you to change your accruals?
4. You have a piece of machinery that you need to expense for depreciation. You know that the machine will last around 7 years. This machine’s repair costs and earnings will be fairly even for the 7 year life cycle this machine will run. You know that this type of machine would theoretically fit straight line depreciation, but you are considered claiming it as a declining balance method. Your organization is looking at paying a hefty amount in the next tax season and a declining method would help you lower reportable income. How likely are you to choose the declining balance method for depreciation of the machine?

5. Your publicly traded organization is in the middle of a lawsuit. You know that you need to accrue an amount on your financial statements if you are likely to lose. To find this out, you talk to your company’s lawyers and they said the organization is most likely going to lose the lawsuit and owe around $740,000. That number is quite a large expense, so you are considering only accruing $300,000, allowing your organization to show more income to users. How likely are you to accrue the $300,000 instead of the full $740,000? *

6. You just completed the company's annual financial statements and income was much higher than expected. While the extra income is nice, there is no need to immediately show so much income. You remember that next year the company will be paying a lot of fees to consultants who will be helping your organization with its expansion efforts. You consider paying the consultants some of their fees this year and expensing them before the work has started. How likely are you to expense the future consulting project in your current financial year? *

7. Your company is anticipating higher than normal expenses over the coming fiscal year. You decide to review your accruals to see if anything can be adjusted to help lower expenses. One of your products typically sees 10% expenses for warranty replacements. You consider accruing this expense to 7% for warranty replacements - this would show more income to shareholders. How likely are you to change your 10% accrual to 7%? *
8. Your organization is in the process of applying for loans at the national banks. You know that the bank will use this year's financial statements to determine whether or not you qualify for the loan. This year, your organization had a lot of expenses, bringing net income down significantly compared to prior years. You felt that you were pretty accurate with your accruals, but you could change them to show increased revenue.

How likely are you to change your accruals to increase revenue? *

9. You completed your financial reports and realized that your organization is owing a hefty sum in taxes. Normally this is not an issue, but this year it pushes your organization’s revenue below the goal of a million dollars. One of your expenses completed was machine repairs, which you anticipated to be expensed over 10 years, however, if you expense it over 3 years your organization will meet its goal of a million dollars.

How likely are you to expense machine repair costs over 3 years?

10. Your organization is interested in obtaining some new investors to help lift the financial burden of a large expansion project they are undertaking. You have been asked to give a presentation to a group of potential investors on your organization’s projected financials for the next fiscal year. You have completed your work and the projections show that next year's income and cash flows will be about 10% less than the historical average. While you feel your original projections are accurate, and believe the company will see slightly worse results next year, you feel the investors will not be happy to see a downward trend in the forecast. Because forecasts are only a “best guess” you consider revising them to no longer show a 10% decrease and instead be inline with your company's historical averages.

How likely are you to increase your projections to match the company's average trend? *
Appendix C

Organizational Citizenship Behaviour Decision Making Scenarios

Six decision-making scenarios measured on a 7-point Likert scale of 1 (Very Unlikely) to 7 (Very Likely). * Indicates that the scenario was utilized in the final five OCB decision-making scenarios.

1. Your organization is hosting a fundraiser dinner on Friday afternoon where multiple investors are planning to attend. Your organization really wanted someone from every department to be present at the dinner. So far, nobody from your department has volunteered to go. This is partly due to a really busy work week, where everyone, including yourself, have been 'putting out fires' everyday. How likely are you to volunteer to go to the fundraiser? *

2. You are in the lunchroom with your colleagues discussing different issues when one of your colleagues starts to discuss how terrible your organization is. How likely are you to defend the organization?

3. This week was particularly hectic at work – you had a ton of things to do but somehow managed to complete all your tasks. Luckily, today is Friday and your work week is finally winding down. One of your company's managers comes by your office and informs you of a mid-day non-mandatory meeting to discuss new developments in the organization. While this week was exhausting, you are considering attending the meeting. How likely are you to attend this meeting? *

4. You are at a meeting with your department head and colleagues. This meeting is focused on understanding where the organization is going in the future and how your specific department can help. The department head is actively asking employees for their input. You have had a few ideas around this future direction, but are unsure how it will be received. How likely are you to offer your ideas? *

5. One of your new colleagues is having particular trouble understanding how your organization wants their financial reports finalized. You have a ton of work on
your desk, due within the week, but you are considering taking a moment to help your colleague.

How likely are you assist this colleague with their financial reporting? *

6. Your organization has just hired a few new employees in your department. Their office is located a few floors above yours, however, they happen to be on your floor for their orientation.

How likely are you to welcome the new employees? *
Appendix D

Accounting Expert Ratings of the Unethical Pro-Organizational Behaviour and Organizational Citizenship Behaviour Scenarios

Scenarios rated on a 7-point Likert scale of 1 (*Very Ethical*) to 7 (*Very Unethical*)

Scenario benefits the [organization/accountant] rated on a 7-point Likert scale of 1 (*Strongly disagree*) to 7 (*Strongly agree*)

<table>
<thead>
<tr>
<th>Scenarios</th>
<th>How unethical is the scenario</th>
<th>Scenario benefits organization</th>
<th>Scenario benefits accountant</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>SD</td>
<td>Mean</td>
</tr>
<tr>
<td>UPB 1</td>
<td>4.33</td>
<td>1.16</td>
<td>6.33</td>
</tr>
<tr>
<td>UPB 2</td>
<td>2.00</td>
<td>0.00</td>
<td>5.50</td>
</tr>
<tr>
<td>UPB 3</td>
<td>3.50</td>
<td>3.35</td>
<td>7.00</td>
</tr>
<tr>
<td>UPB 4</td>
<td>5.50</td>
<td>2.12</td>
<td>4.00</td>
</tr>
<tr>
<td>UPB 5</td>
<td>5.00</td>
<td>0.00</td>
<td>6.50</td>
</tr>
<tr>
<td>UPB 6</td>
<td>4.50</td>
<td>0.71</td>
<td>6.50</td>
</tr>
<tr>
<td>UPB 7</td>
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<td>0.00</td>
<td>7.00</td>
</tr>
<tr>
<td>UPB 8</td>
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<td>0.00</td>
<td>6.50</td>
</tr>
<tr>
<td>UPB 9</td>
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<td>0.00</td>
<td>4.00</td>
</tr>
<tr>
<td>UPB 10†</td>
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<td>n/a</td>
</tr>
<tr>
<td>OCB 1</td>
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<td>0.71</td>
<td>6.50</td>
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<td>OCB 2</td>
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<td>1.00</td>
</tr>
<tr>
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<td>6.00</td>
</tr>
<tr>
<td>OCB 4</td>
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</tr>
<tr>
<td>OCB 5</td>
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<td>1.41</td>
<td>5.50</td>
</tr>
<tr>
<td>OCB 6</td>
<td>2.00</td>
<td>1.41</td>
<td>7.00</td>
</tr>
</tbody>
</table>
Note. UPB = Unethical Pro-Organizational Behaviour, OCB = Organizational Citizenship Behaviour.

Bolded scenarios were utilized in the main study.

† item was developed with one of the accounting experts after the interviews.
Appendix E

Unethical Pro-Organizational Behavior Scale (UPB; Umphress et al., 2010)

Six items measured on a 7-point Likert scale ranging from 1 (*strongly disagree*) to 7 (*strongly agree*).

1. If it would help my organization, I would misrepresent the truth to make my organization look good.

2. If it would help my organization, I would exaggerate the truth about my company’s products or services to customers and clients.

3. If it would benefit my organization, I would withhold negative information about my company or its products from customers and clients.

4. If my organization needed me to, I would give a good recommendation on the behalf of an incompetent employee in the hope that the person will become another organization’s problem instead of my own.

5. If my organization needed me to, I would withhold issuing a refund to a customer or client accidently overcharged.

6. If needed, I would conceal information from the public that could be damaging to my organization.
Appendix F

Propensity to Morally Disengage Scale (PMD; Moore et al., 2012)

Eight items measured on a 7-point Likert scale ranging from 1 (strongly disagree) to 7 (strongly agree).

1. It is okay to spread rumors to defend those you care about.
2. Taking something without the owner’s permission is okay as long as you’re just borrowing it.
3. Considering the ways people grossly misrepresent themselves, it’s hardly a sin to inflate your own credentials a bit.
4. People shouldn’t be held accountable for doing questionable things when they were just doing what an authority figure told them to do.
5. People can’t be blamed for doing things that are technically wrong when all their friends are doing it too.
6. Taking personal credit for ideas that were not your own is no big deal.
7. Some people have to be treated roughly because they lack feelings that can be hurt.
8. People who get mistreated have usually done something to bring it on themselves
Appendix G

Social Desirability Scale (Reynolds, 1982)

13 items answered on a true (1) or false (2) scale.

1. It is sometimes hard for me to go on with my work if I am not encouraged
2. I sometimes feel resentful when I don’t get my way.
3. On a few occasions, I have given up doing something because I thought too little of my ability.
4. There have been times when I felt like rebelling against people in authority even though I knew they were right.
5. No matter who I’m talking to, I’m always a good listener. (R)
6. There have been occasions when I took advantage of someone.
7. I’m always willing to admit when I make a mistake. (R)
8. I sometimes try to get even rather than forgive and forget.
9. I am always courteous, even to people who are disagreeable. (R)
10. I have never been irked when people expressed ideas very different from my own. (R)
11. There have been times when I was quite jealous of the good fortune of others.
12. I am sometimes irritated by people who ask favours of me.
13. I have never deliberately said something that hurt someone’s feelings. (R)
Appendix H

Honesty-Humility scale (Ashton & Lee, 2009)

10 items measured on a 7-point Likert scale of 1 (Strongly disagree) to 5 (Strongly agree).

1. I wouldn’t use flattery to get a raise or promotion at work, even if I thought it would succeed.
2. If I want something from someone, I will laugh at that person's worst jokes. (R)
3. I wouldn’t pretend to like someone just to get that person to do favors for me.
4. If I knew that I could never get caught, I would be willing to steal a million dollars. (R)
5. I would never accept a bribe, even if it were very large.
6. I’d be tempted to use counterfeit money, if I were sure I could get away with it. (R)
7. Having a lot of money is not especially important to me.
8. I would get a lot of pleasure from owning expensive luxury goods. (R)
9. I think that I am entitled to more respect than the average person is. (R)
10. I want people to know that I am an important person of high status. (R)
Appendix I

Recruitment Email Script – Network Recruitment

Project Title: Study on selecting high quality candidates

Dr. Johanna Weststar (Primary Investigator)

Associate Professor, DAN Department of Management and Organizational Studies
Western University
Office: SSC 4427, Email:

Trevor Coppins (Researcher)

MSc Student, Industrial/Organizational Psychology
Western University
Office: SSC 8433, Email:

Email Script

Subject Line: Invitation to participate in a study on selecting high quality candidates for a chance to win 1 of 25 Amazon gift cards (valued at $25 CAD or $20 USD).

Hello,

We are contacting you today to invite you to participate in our research study about how professionals behave and make decisions in organizations. Ultimately, these responses will be utilized to help select accounting student applicants for competitive university programs. We want to ensure that future accounting students can make hard decisions that they may encounter in the workplace. If you agree to participate, you will be asked to complete an online survey where you will be asked to answer questions about your general work demographics, attitudes towards work, general behavioural tendencies, and to rate a series of decision-making scenarios. In order to be entered for the gift card draw, your email address will be requested.

For completing the survey, you will be entered in a draw to win 1 of 25 Amazon gift cards ($25 CAD or $20 USD). This survey should approximately 15 minutes and can be done at your convenience.

If you wish to participate, please go to the following Qualtrics survey: https://uwo.eu.qualtrics.com/jfe/form/SV_0Iobbjb9238IzuR. The first page will provide more information and seek your consent to participate.
Thank you,

**Trevor Coppins (Researcher)**

MSc Student, Industrial/Organizational Psychology

Western University

Office: SSC 8433, Email:

**Dr. Johanna Weststar (Primary Investigator)**

Associate Professor, DAN Department of Management and Organizational Studies

Western University

Office: SSC 4427, Email:
Appendix J

Letter of Information and Consent – Networking Samples

Project Title: Study on selecting high quality candidates

Dr. Johanna Weststar (Principal Investigator)

Associate Professor, DAN Department of Management and Organizational Studies
Western University

Office: SSC 4427, Email:

Phone:

Trevor Coppins (Researcher)

MSc Graduate Student, Industrial/Organizational Psychology
Western University

Office: SSC 8433, Email:

Invitation to participate and rationale for the study

You are invited to participate in a study that investigates factors related to decision making within organizations. You have been asked to participate in this study because of your background in accounting and/or finance, which is our primary population of focus for this project.

We are conducting this study to create a selection tool for university accounting students. We hypothesize that the ability to make tough decisions in organizations is an important predictor of future job success post graduation. To ensure the selection tool is valid, we ask you to provide candid answers as to how you would typically behave. Throughout the study, you will be asked questions about your general work demographics, attitudes towards work, general behavioural tendencies, and be asked to rate a series of decision-making scenarios. This survey should take approximately 15 minutes to complete.

Procedures

If you agree to participate, you will take an online survey where you will be asked to read and rate a series of questions related to demographics, attitudes towards work, general behaviour tendencies and decision-making scenarios. At the end of the survey, you will be provided with a randomly generated code for your opportunity to be entered into a gift card draw. Please write down or copy this code as you will need to enter it in a separate survey link for survey completion verification. Once you have received your randomly generated code, you will be asked to click on a separate Qualtrics survey link to provide your email address and your randomly generated code. Your email address will only be
utilized to contact you if you won the gift card draw and will not be utilized for any other research function. The responses in the second survey (your randomly generated code and your email address) will also be held in a separate data file from your survey responses in the first/primary survey.

To participate in this study, you should be a current or former member of the accounting/finance field and over the age of 18 years old.

**Benefits, Risks and Harms of Participating**

There are no known or anticipated risks or discomforts associated with participating in this study. You may not directly benefit from participating in this study but information gathered may provide benefits to society as a whole, which include a greater understanding of how to select a deserving candidate for a university program.

**Compensation**

You will be entered into a draw to win 1 of 25 Amazon gift cards, with each gift card valued at $25 CAD or $20 USD (depending on country of residence), for your participation in the study. If you win the draw, you will be notified through email. Once you have completed the study, click on the link to the second survey and enter your randomly generated code and email address to be entered into the draw.

**Your Ability to Leave and Confidentiality**

You may choose to end the study at any time, your participation is completely voluntary. However, if you decide to withdraw from the study by closing your internet browser, the information that was collected prior to you leaving the study cannot be excluded. If you decide to withdraw from the study at the end of the survey, you have the right to request withdrawal of information collected about you. If you wish to have your information removed, please email the researchers your randomly generated code provided to you at the end of the study. Once the study has been published we will not be able to withdraw your information.

The information you provide in this study is not completely anonymous. We are collecting your email for compensation purposes, however, your email will be kept in a separate survey and data file from your survey responses at all times. Your contact information will not be shared outside of the research team and will not be included in any dissemination of our research. Therefore, your primary survey responses will not contain any identifiable information but your survey responses can be linked to your email by the research team using the randomly generated code. Stated otherwise, the research team is able to link your survey responses to your email provided for compensation purposes and this may reveal your identity to the research team if your email address contains identifiable information, such as your name. Your survey responses will be collected through a secure online survey platform called Qualtrics. Qualtrics uses encryption technology and restricted access authorizations to protect all data collected. In addition, Western’s Qualtrics server is in Ireland, where privacy standards are maintained under the European Union safe harbour framework. The data
will then be exported from Qualtrics and securely stored on Western University's server. Representatives of The University of Western Ontario Non-Medical Research Ethics Board may require access to your study-related records to monitor the conduct of the research.

A list linking your randomly generated code with your email will be kept by the researcher in a secure place, separate from your study file. All data will be stored on a secure server at Western University and will be retained for a minimum of 7 years.

**Your Rights as a Participant**

Your participation in this study is voluntary. You may decide not to be in this study. Even if you consent to participate you have the right to not answer individual questions or to withdraw from the study at any time. You may also withdraw at any time prior to submitting your survey responses. If you choose not to participate or to leave the study at any time it will have no effect on your employment. You do not waive any legal right by consenting to this study.

If you have questions about this research study please contact: Trevor Coppins (Researcher) or Johanna Weststar (Principal Investigator).

If you have any questions about your rights as a research participant or the conduct of this study, you may contact The Office of Human Research Ethics (519) 661-3036, 1-844-720-9816, email: ethics@uwo.ca. This office oversees the ethical conduct of research studies and is not part of the study team. Everything that you discuss will be kept confidential.

You indicate your voluntary agreement to participate by responding to the survey.

**This letter is yours to keep for future reference.**
Appendix K

Project Title: Study on selecting high quality candidates

Dr. Johanna Weststar (Primary Investigator)
Associate Professor, DAN Department of Management and Organizational Studies
Western University
Office: SSC 4427, Email:

Trevor Coppins (Researcher)
MSc Student, Industrial/Organizational Psychology
Western University
Office: SSC 8433, Email:

Email Script

Subject Line: Invitation to participate in a compensated study on selecting high quality candidates

Hello,

We are contacting you today to invite you to participate in our research study about how professionals behave and make decisions in organizations. Ultimately, these responses will be utilized to help select accounting student applicants for competitive university programs. We want to ensure that future accounting students can make hard decisions that they may encounter in the workplace. If you agree to participate, you will be asked to complete an online survey where you will be asked to answer questions about your general work demographics, attitudes towards work, general behavioural tendencies, and to rate a series of decision-making scenarios.

For completing the survey, you will be compensated with a $2.00 through Amazon Mechanical Turk. This survey should take approximately 15 minutes and can be done at your convenience.

If you wish to participate, please go to the following Qualtrics survey: https://uwo.eu.qualtrics.com/jfe/form/SV_8fc5ggKBL1BWzl3. The first page will provide more information and seek your consent to participate.

Thank you,

Trevor Coppins (Researcher)
MSc Student, Industrial/Organizational Psychology
Western University

Office: SSC 8433, Email:

**Dr. Johanna Weststar (Primary Investigator)**

Associate Professor, DAN Department of Management and Organizational Studies

Western University

Office: SSC 4427, Email:
Appendix L

Letter of Information and Consent – Amazon Mechanical Turk

Project Title: Study on selecting high quality candidates

Dr. Johanna Weststar (Principal Investigator)

Associate Professor, DAN Department of Management and Organizational Studies
Western University
Office: SSC 4427, Email:
Phone:

Trevor Coppins (Researcher)

MSc Graduate Student, Industrial/Organizational Psychology
Western University
Office: SSC 8433, Email:

Invitation to participate and rationale for the study

You are invited to participate in a study that investigates factors related to decision making within organizations. You have been asked to participate in this study because of your background in accounting and/or finance, which is our primary population of focus for this project.

We are conducting this study to create a selection tool for university accounting students. We hypothesize that the ability to make tough decisions in organizations is an important predictor of future job success post graduation. To ensure the selection tool is valid, we ask you to provide candid answers as to how you would typically behave. Throughout the study, you will be asked questions about your general work demographics, attitudes towards work, general behavioural tendencies, and be asked to rate a series of decision-making scenarios. This survey should take approximately 15 minutes to complete.

Procedures

If you agree to participate, you will take an online survey where you will be asked to read and rate a series of questions related to demographics, attitudes towards work, general behaviour tendencies and decision-making scenarios. At the end of the survey, you will be given a randomly generated code. You will be asked to input this random generated code in our study’s corresponding Mechanical Turk interface for compensation approval.

To participate in this study, you should be a current or former member of the accounting/finance field and over the age of 18 years old.
Benefits, Risks and Harms of Participating

There are no known or anticipated risks or discomforts associated with participating in this study. You may not directly benefit from participating in this study but information gathered may provide benefits to society as a whole, which include a greater understanding of how to select a deserving candidate for a university program.

Compensation

You will be compensated $2.00 USD for your participation in this study. You will receive your compensation through Amazon Mechanical Turk’s interface. Once you have completed the study, please enter the random generated Qualtrics code into our study’s corresponding Amazon Mechanical Turk interface. Once this code is provided, the researchers can approve your compensation. While the researchers will try to approve your compensation as quickly as possible, please allow up to 2 weeks for compensation approval.

Your Ability to Leave and Confidentiality

You may choose to end the study at any time, your participation is completely voluntary. However, if you decide to withdraw from the study by closing your internet browser before the final page of the survey, the information that was collected prior to you leaving the study cannot be excluded and you will also not receive a random code which you require for compensation. If you decide to withdraw from the study at the end of the survey, you have the right to request withdrawal of information collected about you. If you wish to have your information removed, please email the researchers the randomly generated code provided to you at the end of the study. Once the study has been published we will not be able to withdraw your information.

The information you provide in this study is anonymous and no identifiable information will be collected. Your survey responses will be collected anonymously through a secure online survey platform called Qualtrics. Qualtrics uses encryption technology and restricted access authorizations to protect all data collected. In addition, Western’s Qualtrics server is in Ireland, where privacy standards are maintained under the European Union safe harbour framework. The data will then be exported from Qualtrics and securely stored on Western University’s server. Representatives of The University of Western Ontario Non-Medical Research Ethics Board may require access to your study-related records to monitor the conduct of the research.

All data will be collected anonymously and neither the researchers nor anyone else will be able to identify you as a research participant. The data will be stored on a secure server at Western University and will be retained for a minimum of 7 years.

Your Rights as a Participant

Your participation in this study is voluntary. You may decide not to be in this study. Even if you consent to participate you have the right to not answer individual questions or to withdraw from the study at any time. You may also withdraw at any time prior to
submitting your survey responses. If you choose not to participate or to leave the study at any time it will have no effect on your employment. You do not waive any legal right by consenting to this study.

If you have questions about this research study please contact: Trevor Coppins (Researcher) or Johanna Weststar (Principal Investigator).

If you have any questions about your rights as a research participant or the conduct of this study, you may contact The Office of Human Research Ethics (519) 661-3036, 1-844-720-9816, email: ethics@uwo.ca. This office oversees the ethical conduct of research studies and is not part of the study team. Everything that you discuss will be kept confidential.

You indicate your voluntary agreement to participate by responding to the survey.

This letter is yours to keep for future reference.
Appendix M

Distractor survey

Three items measured on a 5-point Likert scale of 1 (Strongly disagree) to 7 (Strongly agree).

1. University and college programs prepare professionals for success in the working world
2. I feel that my transition into the professional world was successful
3. I feel that the selection process for university or college programs is fair

Five items in a multiple choice, multiple selection matrix. Participants were instructed to choose one or more of the following selection procedures they agreed with.

1. Intelligence testing
2. Face to face interviews
3. Realistic scenario test (e.g., faced with a dilemma)
4. Ranked by GPA
5. Ranked by extra curricular activities
Ethics Approval

Date: 17 April 2019
To Dr. Johanna Westgar
Project ID: 113410
Study Title: Study on selecting high quality candidates
Short Title: Study on selecting high quality candidates
Application Type: NMREB Initial Application
Review Type: Delegated
Full Board Reporting Date: May 3 2019
Date Approval Issued: 17 Apr 2019
REB Approval Expiry Date: 17 Apr 2020

Dear Dr. Johanna Westgar

The Western University Non-Medical Research Ethics Board (NMREB) has reviewed and approved the WREM application form for the above-mentioned study, as of the date noted above. NMREB approval for this study remains valid until the expiry date noted above, conditional to timely submission and acceptance of NMREB Continuing Ethics Review.

This research study is to be conducted by the investigator noted above. All other required institutional approvals must also be obtained prior to the conduct of the study.

Documents Approved:

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<th>Document Type</th>
<th>Document Date</th>
<th>Document Version</th>
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No deviations from, or changes to the protocol should be initiated without prior written approval from the NMREB, except when necessary to eliminate immediate hazard(s) to study participants or when the change(s) involves only administrative or logistical aspects of the trial.

The Western University NMREB operates in compliance with the Tri-Council Policy Statement Ethical Conduct for Research Involving Humans (TCPS2), the Ontario Personal Health Information Protection Act (PHIPA, 2004), and the applicable laws and regulations of Ontario. Members of the NMREB who are named as investigators in research studies do not participate in discussions related to, nor vote on such studies when they are presented to the REB. The NMREB is registered
**Curriculum Vitae**

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<tr>
<th>Name:</th>
<th>Trevor Coppins</th>
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<tr>
<td><strong>Post-secondary</strong></td>
<td>George Brown College, Toronto, Ontario, Canada</td>
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<td><strong>Education and Degrees:</strong></td>
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<td></td>
<td>York University, Toronto, Ontario, Canada</td>
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<td>2013-2016 B.A.</td>
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<td>Western University, London, Ontario, Canada</td>
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<td>2017-2019 MSc (Forthcoming)</td>
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