

Constructive Deviance and Proactive Behaviors: Two Distinct Approaches to Change and Innovation in the Workplace

La Déviance Constructive et les Comportements Proactifs : Deux Approches Distinctes du Changement et de l'Innovation sur le Lieu de Travail

Guillaume R. M. **Déprez**, Adalgisa **Battistelli**, Jean-Sébastien **Boudrias**, and Nicola **Cangialosi**

Université de bordeaux, laboratoire de psychologie EA 4139

Université de Montréal, laboratoire de psychologie

Università degli studi Firenze, “formazione, lingue, intercultura, letterature e psicologia”

Corresponding author: Guillaume r. m. Déprez,
Université de Bordeaux, Laboratoire de Psychologie EA4139
3ter place de la Victoire, 33000 Bordeaux, France
Email: guillaume.deprez@u-bordeaux.fr
ORCID: [0000-0003-1554-6105](https://orcid.org/0000-0003-1554-6105)

Authors note: We acknowledge that we do not have any conflict of interest to disclose.

PLEASE CITE AS:

Déprez, G. R. M., Battistelli A., Boudrias J.-S., & Cangialosi N. (2020). Deviance and proactive behaviors: two distinct approaches to change and innovation in the workplace. *Le Travail Humain*, 83(3), 235 – 267. doi:10.3917/th.833.0235

The original article can be found at: <https://doi.org/10.3917/th.833.0235>

SUMMARY

This article examines the factorial structure and nomological network of constructive deviant behavior, relying notably on Galperin (2012) scale. In a series of two studies, we investigate the construct internal structure and its relationships with theoretically related constructs to deepen our understanding of the nature of this construct. Data were obtained from French workers (N = 680) using social media. The first study is a validation of the French translation of Galperin (2012) constructive deviant behavior scale. The second study investigates how this scale fits within the domain of positive deviance behaviors. As such, we challenge the proposition of Vadera, Pratt & Mishra (2013) that a single second-order “umbrella” construct would explain the manifestation of different first-order constructive deviance (e.g., constructive deviant behavior, prosocial rule-breaking behavior) and proactive constructs (e.g., voice, innovative work behavior, and taking charge). We hypothesize that these constructs would be best represented in two second-order factors. Concerning the first study, convergent and discriminant validity evidence supported a 7-item scale. Regarding the second study, confirmatory factor analyses revealed the discriminant validity of each first-order construct and their convergence in two higher-order factors, labelled “constructive deviance work behavior” and “proactive work behavior”. Constructive deviance and proactive behaviors thus represent two fundamentally different approaches for change and innovation in organizations. As expected, Galperin’s (2012) scale is associated with constructive deviance work behavior rather than with proactive work behavior. Following the current research popularity of constructive deviance, our research provides keys to understand its specificity in relation to other types of positive behaviors.

KEYWORDS: constructive deviance, innovation, proactivity, behavioral constructs, scale translation, second-order factor

RESUME EN FRANÇAIS

Cet article examine la structure factorielle et l'approche conceptuelle des comportements déviants constructifs en s'appuyant notamment sur l'échelle de Galperin (2012). Via deux études, nous approfondissons l'examen de la structure interne de la déviance constructive et ses relations avec des construits théoriquement liés. Les données ont été recueillies auprès de travailleurs français (N = 680) par l'utilisation des réseaux sociaux. La première étude est une validation de la traduction française de l'échelle de comportements déviants constructifs de Galperin (2012). La seconde étude examine comment cette échelle s'inscrit dans le domaine des comportements de déviance positive. Ainsi, nous discutons la proposition de Vadera, Pratt et Mishra (2013) selon laquelle un facteur de second ordre unique "en ombrelle" regrouperait des construits déviants positifs (i.e., le comportement déviant constructif et le comportement prosocial de non-respect des règles) et proactifs (i.e., la prise de parole, l'innovation au travail et la prise en charge). Nous formulons l'hypothèse selon laquelle ces comportements se regrouperaient en deux facteurs de second ordre. La première étude analyse les propriétés divergente et convergente de l'échelle de mesure de la déviance constructive (Galperin, 2012). Une structure bifactorielle en 7 items est observée. La seconde étude vérifie, via des analyses factorielles confirmatoires, la validité discriminante de chaque construit de premier ordre et leur convergence en deux facteurs d'ordre supérieur, intitulés « comportement de déviance constructive au travail » et « comportement proactif au travail ». La déviance constructive et les comportements proactifs représentent donc deux approches fondamentalement différentes du changement et de l'innovation dans les organisations. L'échelle de Galperin (2012) est associée au comportement de déviance constructive au travail plutôt qu'au comportement proactif au travail. Vu la popularité actuelle de l'étude sur la déviance constructive, notre recherche fournit des clés pour comprendre sa spécificité par rapport à d'autres comportements similaires.

MOTS CLÉS : déviance constructive, innovation, proactivité, construits comportementaux, traduction d'échelle, facteur de second ordre

Constructive Deviance and Proactive Behaviors: Two Distinct Approaches to Change and Innovation in the Workplace

I INTRODUCTION

The organizational literature primarily studied deviant behavior as the destructive intent to harm the organization or peers (Bennett & Robinson, 2000; Judge, Scott, & Ilies, 2006; Robinson & Bennett, 1995). However, in the last twenty years, researchers focused on an alternative point of view (Galperin & Burke, 2006; Warren, 2003) and analyzed deviance as a positive organizational behavior contributing to support (Galperin, 2012), change (Spreitzer & Sonenshein, 2004), and innovation (Acharya & Taylor, 2012; Galperin, 2002) within the organization. Constructive deviance¹ refers to employees' behaviors deviating from the norms and aiming to increase well-being and organizational performance (Galperin, 2012).

Although literature is continuing to investigate destructive deviance, studies on the relationships between constructive deviance, and other kinds of behaviors spark increased interest in the deviance literature (Galperin, 2012; Galperin & Burke, 2006; Warren, 2003). Vadera, Pratt and Mishra (2013) proposed an integrative model of positive deviance and defined it as “an umbrella term that encompasses several different behaviors, including taking charge, creative performance, expressing voice, whistle-blowing, extra-role behaviors, prosocial behaviors, prosocial rule breaking, counter-role behaviors, and issues selling” (p.1221). Some behaviors were originally described as being “clearly deviant” (e.g., whistle-blowing, prosocial rule breaking) while others, based on the organizational context (e.g., climate, job characteristics) were presented as “potential” deviant (e.g., voice, taking charge).

Despite its integrative appeal, the Vadera et al. (2013) approach also reveals that the constructive deviance literature remains unclear. Indeed, the difference between “clearly

deviant” and “potential” types of deviant behaviors could lead to construct drift and contamination. In a review on change and innovation-related concepts (CI), Potočnik and Anderson (2016) warn us on the dysfunctional operationalization of similar constructs like for example: innovative work behavior, proactive behaviors, and extra-role behaviors. Most of the behaviors presented by Potočnik and Anderson (2016) are included in the Vadera et al.’s (2013) positive deviance overarching global construct. Despite the theoretical similarities between deviant and CI-oriented behaviors, the grouping of all positive deviant behaviors under a single unitary higher-order construct could be the result of an erroneous assumption based on surface similarity rather than a thorough empirical investigation of behaviors subsumed under the positive deviance term. To clarify the theoretical ambiguity and potential overlap that might exist between concepts oriented towards CI and/or deviance (see Table 1), researchers have call to use analytical approaches enabling to test the construct validity of both global positive deviance constructs and specific behaviors subsumed under them (Parker & Collins, 2010; Potočnik & Anderson, 2016; Vadera et al., 2013).

In this article, we propose to integrate Galperin’s constructive deviance concept (2012) — composed of two specific indicators of deviance — as a distinct construct yet possibly part of an overarching dimension reflecting a specific type of positive deviance in organizational settings. Consequently, we first aimed at testing the validity of a French version of Galperin’s constructive deviance scale (CDBS), translated from English. Then, we aimed at verifying if the CDBS can be subsumed under a single broad umbrella construct reflecting CI or if it relates to a more specific higher-order construct reflecting a form of positive deviance, which is more clearly in rupture to norms in organizational settings in comparison to others types of behaviors (e.g. proactive behaviors).

¹ Throughout this article we will take as a reference the approach toward “norms” defended in Galperin’s work (2002, 2012). For more in-depth research on the nature of the “norm” and its role in deviant behaviors see Meier, Brière, and Le Roy (2019).

The article is structured as follows. First, we briefly review the recent literature on constructive deviance and destructive deviance in the organizational context. Second, we present two studies investigating the nature of the constructive deviance construct. In Study 1, we present confirmatory factor analysis (CFA) results on the CDBS measure and examine its convergent and discriminant validity in a French sample. In Study 2, using second-order factor analysis, we empirically verify if a positive deviance umbrella construct, encompassing some of the behaviors proposed by Vadera et al. (2013), is a viable construct. In contrast, based on their different positioning towards norms (clear or not-clear rupture, Galperin & Burkes, 2006), we hypothesized the existence of two second-order factors integrating behaviors in the CI's literature. The first one would regroup the behaviors originally defined as “clearly deviant” behavior, called in the literature constructive deviant work behavior. The second one would regroup the “potentially deviant” behaviors, called in the literature proactive work behavior. Finally, practical and theoretical implications of results obtained are raised in a general discussion.

I.1 DESTRUCTIVE AND CONSTRUCTIVE DEVIANCE

Destructive deviance is conceptualized as behavior that is harmful to its environment. Robinson and Bennett (1995) define destructive deviance as a “voluntary behavior that violates significant organizational norms and, in so doing, threatens the well-being of an organization, its members, or both” (p. 557). These authors split destructive deviance into two axes: the behavior’s target (organizational/interpersonal) and the severity of the harmful behavior (minor/serious). In the last decade, scholars largely studied destructive deviance and Bennett and Robinson’s (2000) two-factor model (composed of organizational and interpersonal deviance) is the approach most widely used in the literature². Research suggested a wide range of antecedents, like personality traits, organizational justice (Berry, Ones, & Sackett, 2007), superior aggression (Herscovis & Barling, 2010), and task

satisfaction (Zoghbi-Manrique-de-Lara, 2010). Studies focusing on destructive deviance outcomes highlight its huge financial impact (Henle, Giacalone, & Jurkiewicz, 2005; Peterson, 2002) and show its negative effects on organizational productivity and performance (Hussain, Sia, & Mishra, 2014), as well as on workers exposed to mistreatment (Reio & Ghosh, 2009). In sum, destructive deviance indicates behaviors clearly deviating from organizational norms that aim to harm itself, others or its environment and mostly produce negative outcomes.

(Table 1 about here)

However, deviance is not only a negative concept (Warren, 2003). Deviant behavior could be oriented towards a promotional process that, ultimately, will contribute to performance within the organization. The literature defines positive or constructive deviance behavior as a "voluntary behavior that violates significant norms with the intent of improving the well-being of an organization, its members or both" (Galperin, 2002). Adoption of deviant behavior could bring positive outcomes in relation to three targets (Galperin, 2002; Galperin & Burke, 2006): organizational innovation (looking for innovative/nonconventional procedures to help the organization), interpersonal interaction (disobeying orders or alerting the competent organizational authorities to bring positive change), or seeking challenges at organizational levels (challenging established standards to support the organization). Therefore, constructive deviance supposes an organizational innovative process in which individuals wish to bring improvement in their organization but do it outside the boundaries accepted in the organization (Galperin, 2002; Merton, 1968). This process is characterized by a departure from the norm that brings out the expression of constructive deviant behaviors, which are captured in the CDBS measure in two factors: interpersonal and organizational deviance (Galperin, 2012).

² For different approaches, see Spector et al., 2006; Desrumaux, Leoni, Bernaud, and Defrancq, 2012.

The first factor concerns behaviors that focus on individuals and presents the “deviant” as someone who does not follow the orders of his or her supervisor or who challenges the team to increase its performance. The second factor refers to behavior challenging or breaking existing organizational standards to help the organization. Previous research has related the two dimensions with various antecedents such as role breadth self-efficacy and workaholism (Galperin & Burke, 2006) and Machiavellianism (Galperin, 2012). Other studies examine the relationship between the CDBS and psychological ownership (Chung & Moon, 2011; Yildiz, Alpkan, Ates, & Sezen, 2015) and perceived organizational support (Kura, Shamsudin, & Chauhan, 2016). To our knowledge, only one empirical study has assessed the CDBS in relation to outcomes such as performance (see Mertens, Recker, Kummer, Kohlborn, & Viaene, 2016). Likewise, except for Vadera et al.’s (2013) theoretical proposition, there is no study analyzing the relationship between the CDBS and other CI constructs as proactive behaviors (see Table 1). It is important to better understand the nature of deviant and proactive behaviors to verify whether constructive deviance behaviors are distinct from other proactive constructs subsumed under CI-oriented behaviors.

I.2 CONSTRUCTIVE DEVIANCE BEHAVIORS AND THEIR RELATIONSHIPS WITH CHANGE AND INNOVATION-ORIENTED BEHAVIORS

Studies on constructive deviance assessed through the CDBS assume the existence of innovation implications for the organizational and interpersonal contexts. These implications can be seen at the behavioral, contextual, production, and/or innovative-thinking levels. The CDBS indicates innovative results, which are explained by the “valuable” properties of constructive deviant behaviors and related to processes that promote organizational change (Galperin, 2002, 2012). Furthermore, Vadera et al. (2013) integrate creativity, an innovation generation-related construct (Anderson, Potočnik, and Zhou, 2014), into the positive deviance umbrella concept. Finally, the innovation process is more likely to emerge in a context where the individual displayed divergent thinking (Anderson, De Dreu, & Nijstad, 2004). Divergent

thinking might increase exposure to conflicting views and ideas in the work context, which could lead to the adoption of innovative, potentially deviant, behaviors (Acharya & Taylor, 2012). Then, CI constructs deviant behaviors as PSRB or CDBS would be potentially related to CI construct.

However, despite the construct validity evidence for some of the CI-related constructs and behaviors encompassing the positive deviance umbrella, further examinations of construct validity are warranted. Because researchers argue on the similarity between deviant and proactive behaviors, there is a need to carefully analyze construct properties that can lead to confusion, drift, or contamination between concepts studied (Potočnik & Anderson, 2016). The principal difference between the CI and the positive deviant umbrella approach can be found in the inclusion, or not, of deviant behaviors. For example, counterproductive behaviors and PSRB are not considered in the CI-related construct analysis (Potočnik & Anderson, 2016); conversely, they are included in the positive deviance umbrella construct (Vadera et al., 2013). Therefore, the CI analytical approach excludes a whole facet of the literature on the deviant behavioral process through which innovation can emerge. Nevertheless, both CI and positive deviance literature point in the same conceptual direction: behaviors subsumed in each framework are thought to have a positive effect on organizational change. The high similitude between the two propositions can result in construct contamination or construct confusion. Indeed, the positive deviance umbrella approach describes voice and taking charge as positive deviant constructs, despite that they have been defined by other researchers as proactive behaviors (Tornau & Frese, 2013) and empirically substantiated as indicators of a "proactive work behavior" higher-order factor (Parker & Collins, 2010).

Although it seems that each of proactive behaviors and constructive deviant behaviors is oriented toward positive CI, they diverged by their departure from the norms

process. Proactive behaviors, such as voice and taking charge, are presented as anticipatory actions taken by employees (Grant & Ashford, 2008) whereas constructive deviant behaviors, such as the CDBS and PSRB, manifest as behaviors that violate norms (Galperin, 2002) and breaks rules (Dahling et al., 2012). Moreover, the disruptive essence of positive deviance (Galperin, 2012; Morrison, 2006) is opposed to proactive behavior's discretionary and conventional nature (Ohly & Fritz, 2010). Thus, it is possible to assume that, contrary to what was announced by Vadera et al. (2013), constructive deviance behaviors and proactive behaviors would not be part of a single positive deviance umbrella construct. It is more likely to observe the existence of two second-order factors, one composed of proactive behaviors and the other of constructive deviant behaviors, both oriented towards CI. The existence of two second-order factors would be an issue as more and more articles (e.g., Mertens et al., 2016) study proactive behaviors (e. g., voice, creativity) using the deviant umbrella approach. A two second-order factor model would imply that deviant and proactive behaviors cannot be used interchangeably. It would involve that only constructive deviance has a deviant nature and that the potential deviant type of proactivity should be analyzed using other ways as, for example, attitudinal perspective (e.g., Déprez, Battistelli, & Antino, 2019; Warren, 2003). Thus, the behavioral approach would not be a suitable way to investigate the potential deviant nature of proactivity.

Therefore, to disentangle the specific nature of constructive deviance behaviors, based on Potočnik and Anderson (2016), and on Vadera et al. (2013) theories, it is necessary to examine both their distinctiveness and convergence with other behavioral constructs found in deviance and CI literature. In a first study, we propose to test the construct validity of the CDBS proposed by Galperin (2012) and to examine its convergent and discriminant validity in a French sample. Because the CDBS was not available in French, we must first ensure its construct validity before examining the scale in relation to other constructs.

II STUDY 1

II.1 RELATION BETWEEN DESTRUCTIVE DEVIANCE AND THE CONSTRUCTIVE DEVIANCE BEHAVIOR SCALE (CDBS)

The first step is to examine whether the CDBS maintains its two-factor structure for a French sample. A second step is to study the existing correlation between destructive deviance and the CDBS factors. A third step is to analyze the convergent validity between CDBS factors and other deviant or CI-variables. Indeed, the positive intention that defines constructive deviance is also found in similar behaviors (see Vadera et al., 2013), which can be characterized by a willingness to go beyond established norms and standards. Following the proposition of Vadera et al. (2013), we use in this study three specific behaviors: innovative generation of ideas, PSRB, and OCB. We propose that each of them will be related to the CDBS' two-factor structure. To do this, it is necessary to test the CDBS factorial structure on our French sample:

Hypothesis 1. CDBS French version is made up of two factors: interpersonal and organizational.

Conceptually, the two-dimensional CDBS's factors correspond to Bennett and Robinson's (2000) destructive deviance. The principal difference takes shape in the differential agent's intention, and consequence, of helping or harming his or her organization, colleagues, and/or customers (Galperin, 2002, 2012; Warren, 2003). Considering the theoretical differences between constructive and destructive types of deviance and some studies pointing to unique correlates (e.g., Galperin, 2012; Galperin & Burke, 2006), the two deviant behaviors are expected to represent quite different constructs. Despite a large number of studies on destructive deviance, few identify the differential antecedents or consequences of destructive and constructive deviance. Mertens et al. (2016) showed that destructive deviance was negatively related to performance while constructive deviance was positively related to it. Furthermore, a positive relationship was observed between the two CDBS

factors, the organizational citizenship behavior (OCB), and the non-work deviance (Yam, Klotz, He, & Reynolds, 2017).

However, empirical studies (Galperin, 2012; Galperin & Burke, 2006) show a positive correlation between the CDBS and destructive deviance. They explain the positive relationship between destructive deviance and CDBS by the fact that “both forms of deviance encompass behaviors that violate the organizational norms” (Galperin, 2012, p. 3016). Furthermore, whereas destructive and constructive deviance produces different results, they could share similar antecedents, like Machiavellianism (Bennett & Robinson, 2000; Galperin, 2012), or not (e.g., role breadth self-efficacy is uniquely related with the CDBS Galperin, 2012). This reflection on constructs’ antecedents could explain why the two types of deviant behavior are positively related. Consequently, we formulate the following hypotheses:

Hypothesis 2a. Interpersonal Destructive deviance is positively related to interpersonal and organizational CDBS.

Hypothesis 2b. Organizational Destructive deviance is positively related to interpersonal and organizational CDBS.

II.2 INNOVATIVE WORK BEHAVIOR

For the last forty years, innovative behavior has been widely studied in the literature of work and organizational psychology at three levels of analysis: individual, team, and organization (see Battistelli, 2015). West and Farr’s (1990) commonly used definition presents innovative work behavior as “the intentional introduction and application within a role, group or organization of ideas, processes, products or procedures, new to the relevant unit of adoption, designed to significantly benefit the individual, the group, the organization or wider society” (p. 9). Innovation is a cyclical process within the organizational context (West, 1990) composed of three phases: generation, promotion, and implementation of ideas (Janssen, 2000; Kanter, 1988). As innovative work behavior is oriented towards the improvement and modification of the status quo, it could be perceived as a similar construct

to constructive deviance (Acharya & Taylor, 2012; Galperin, 2002). Furthermore, while innovation involves a promotion and implementation phase, breaking norm processes characterizes the CDBS, which can lead to innovative behavior (Anderson et al., 2004; Anderson et al., 2014). In this paper, we pay attention to the idea-generation phase, which relates to the construct of creativity (Anderson et al., 2014) classed by Vadera et al. (2013) as a constructive deviance construct. Idea generation was chosen because of its nature, which implies a deviation from norms and the status quo regarding how organizations do things (Anderson et al., 2014). Since promotion and implementation require the acceptance and support of others, they should not be perceived as deviant (Perry-Smith & Mannucci, 2017); then they were not used in the analysis. Consistent with this body of research, we expect a positive relationship between innovative idea generation and the CDBS.

Hypothesis 3. Innovative idea generation is positively related to interpersonal and organizational CDBS.

II.3 PROSOCIAL RULE-BREAKING BEHAVIOR

As proposed by Spreitzer and Sonenshein (2004), PSRB is a form of positive deviance. This concept is characterized as a deliberate breaking of rules in the interest of the organization or its stakeholders (Dahling, Chau, Mayer, & Gregory, 2012). Three different organizational types of rule breaking could be defined (Morrison, 2006): (1) effectiveness (to be more effective in achieving tasks), (2) coworker aid (to help another employee in his or her work), and (3) customer aid (to provide better customer service). Therefore, this behavior targets a feature of the CDBS, which is breaking the rules for a prosocial goal. The need to be more effective for oneself, the organization, or others explains the prosocial intention. By nature, PSRB implies a violation of the significant norms such as the CDBS and destructive deviance behavior. Furthermore, despite the theoretical distinction of PSRB with counterproductive work behavior, a positive relationship has been found between them (Dahling et al., 2012). We supposed that this construct, by its constructive deviant nature

(Dahling et al., 2012; Morrison, 2006; Vadera et al., 2013), could be a more similar behavior to constructive deviant behavior; hence, we formulate the following hypothesis:

Hypothesis 4a. PSRB effectiveness is positively related to interpersonal and organizational CDBS.

Hypothesis 4b. PSRB coworker aid is positively related to interpersonal and organizational CDBS.

Hypothesis 4c. PSRB customer aid is positively related to interpersonal and organizational CDBS.

II.4 ORGANIZATIONAL CITIZENSHIP BEHAVIOR

Organ (1988) defines organizational citizenship as an “individual behavior that is discretionary, not directly, or explicitly recognized by the formal reward system and that in the aggregate promotes the effective functioning of the organization” (p. 4). Four dimensions are ascribed to OCB (Paillé, 2009; Podsakoff & Mackensie, 1994): (1) helping, (2) sportsmanship, (3) altruism, and (4) civic virtues. In study 1, using OCB analysis, we choose to explore the extra-role aspect: a discretionary process aiming to benefits the organization and going beyond existing role expectations (Van Dyne et al., 1995). We focus our analysis on the helping and civic virtues dimension, which are dimensions presented as affiliative (Han, Sears, & Zhang, 2018). While constructive deviance required workers to be proactive in norm violation (Galperin, 2012), affiliative OCB supposes the opposite meaning by the act of complying with the norms, rules, and positive influence of perceived organizational support (Battistelli, Galletta, Pothoghese, Pohl, & Odoardi, 2013; Pohl, Dal Santo, & Battistelli, 2012). Thereby, OCB’s passive and discretionary nature is conceptually opposed to the constructive deviance displayed behavior. Although some authors questioned the discretionary nature of OCB (e.g., Coyle-Shapiro, Kessler, & Purcell, 2004; Vigoda-Gadot, 2007), empirical studies demonstrated a negative relationship between OCB and the CDBS (Galperin, 2012) and between OCB and destructive deviance (Evans, Goodman, & Davis,

2011). In this study we made the choice to explore the Based on these assumptions, we propose that OCB and the CDBS dimensions will exhibit a negative relationship, which is consistent with Galperin's (2012) results. Consequently, we formulate the following:

Hypothesis 5a. OCB helping dimensions should be negatively related to interpersonal and organizational CDBS.

Hypothesis 5b. OCB civic-virtue dimensions should be negatively related to interpersonal and organizational CDBS.

II.5 METHOD

II.5.1 *Sample and procedure*

Our sample (sample 1) was composed of French workers ($N = 300$) from different organizations from both public (42%) and private sectors (58%); 83% were women. The average age was 33 years ($SD = 11.47$) with most of them having the French Baccalaureate level (96.7%) and less than half (39.7%) a degree better than the bachelor's diploma (master's, PhD). Sixty-eight percent of the participants were employees; 32% were managers. The average job tenure job was 7.17 years ($SD = 7.85$), and half of them had more than five years of organizational tenure. The sample targeted four different job sectors: trade (22.9%), industry (21.2%), health (30.7%), and social services (25.2%).

The French workers had full-time jobs and were recruited on different social networks (Facebook, LinkedIn, and Viadeo); participants responded to the survey through the electronic platform Limesurvey. The entire sample was composed of spontaneous participation. We informed the participants that, although the surveys were not anonymous (to provide feedback, we sent mail to the respondents), the data were confidential to us. We also assured that the study did not have any commercial aims. Prior agreement of participants to join the research was required. Missing data were deleted list-wise.

II.5.2 Measures

In the current study, the data were collected by self-report procedures. Except for OCB, scales used in the study required a translation from English to French. For each of them, we followed Brislin's (1970) recommendations. A 5-point Likert-type response scale was used for all measures. CDB, destructive deviance and idea-generation were rated from "never = 1" to "always = 5," and PSRB and OCB were rated from "strongly disagree = 1" to "strongly agree = 5." The scale's internal reliabilities ranged from 0.67 to 0.86 (see Table 2).

Constructive Deviance. Galperin's (2012) CDBS was administered. This scale was originally composed of two dimensions: four items for interpersonal deviance (e.g., "Did not follow the orders of your supervisor in order to improve work procedures") and five items for organizational deviance (e.g., "Bent a rule to satisfy a customer's needs").

Destructive Deviance. This variable was measured with the destructive workplace behavior scale developed by Bennett and Robinson (2000), which is composed of two subscales. Originally, this scale had twelve items measuring organizational deviance (e.g., "Put little effort into your work") and seven items measuring interpersonal deviance (e.g., "Publicly embarrassed someone at work").

Innovative Work Behavior Generation. This variable was measured with the idea generation score (see Janssen, 2000; Scott & Bruce, 1994) composed of three items (e.g., "Generating original solutions for problems"). Respondents were asked to rate how often they performed innovative behaviors during their usual work.

Prosocial Rule Breaking. The three PSRB dimensions were measured with the General Pro-social Rule Breaking Scale (Dahling et al., 2012). Originally, thirteen items were used: five to measure efficiency (e.g., "When organizational rules interfere with my job duties, I break those rules"), four to measure customer service (e.g., "I break organizational rules to provide better customer service"), and four to measure coworker aid (e.g., "I help out

other employees, even if it means disregarding organizational policies”). For this study, based on the “Cronbach’s alpha if item removed” results, we used an eleven-item version of the scale with four items for efficiency and three items for co-worker aid. The scale directive asked respondents to rate the extent to which they agreed or disagreed with the workplace behavior item description.

Organizational Citizenship Behavior. The four OCB dimensions were usually measured with the French scale by Podsakoff and Mackensie (1994). For this study, based on the “Cronbach’s alpha if item removed” results from Paillé’s (2009) translation, we only use four items of the helping dimension (e.g., “I am a stabilizing influence in the organization when dissension occurs”) and two of the civic-virtues dimensions (e.g., “Attends and actively participates in organization meetings”). Respondents indicated the extent to which they agreed or disagreed with each item in terms of how well it described their workplace behaviors.

II.5.3 Results

Using Mplus7.4 (Muthen and Muthen, 2015), a CFA with MLR estimator was first performed to examine the CDBS initial structure (Hypothesis 1) proposed by Galperin (2012). In line with Byrne (2012) and Kline’s (2016) recommendations to interpret the model fit indices, the root means square error of approximation (RMSEA), chi-square value and degree of freedom, comparative fit index (CFI), Tucker-Lewis index (TLI), standardized root mean square residual (SRMR), and Akaike information criterion (AIC) were examined (see Tabachnick & Fidell, 2012). An RMSEA and SRMR score less than or equal to 0.08 indicates an acceptable fit (Browne & Cudeck, 1993). CFI and TLI values greater than 0.90 indicate an acceptable model (Brown, 2015).

A first analysis of the CDBS two-factor original model scale was performed. The fit indices showed poor fit for the nine-item, two-factor model ($\chi^2[26] = 124.99, p < 0.001$;

RMSEA = 0.11 CFI = 0.90; TLI = 0.86; SRMR = 0.05). Concerning the French scale adaptation, the best solution was to eliminate problematic indicators (Anderson & Gerbing, 1984). Following a conceptual item examination and a statistical analysis, two items were deleted: "Departed from organizational procedures to solve a customer's problem" and "Disagreed with others in your work group to improve the current work procedure." A shorter seven-item, two-factor scale (see Table 2) with improved fit indices ($\chi^2[13] = 29.03, p < 0.01$; RMSEA = 0.06; CFI = 0.97; TLI = 0.96; SRMR = 0.03; AIC = 5075.516) resulted from this procedure. The scale presented good internal consistency and reliability. Despite the good fit indices, the analysis showed a high correlation between the CDBS interpersonal and organizational dimensions ($r = 0.77, p < 0.001$; see Table 3). Therefore, we tested a unidimensional seven-item CDBS model and obtained lower fit indices in comparison with the two model dimensions ($\chi^2[14] = 35.905, p < 0.001$; RMSEA = 0.72; CFI = 0.97; TLI = 0.95; SRMR = 0.03; AIC = 5083.855.169; $\Delta\chi^2[1] = 27.36, p < 0.01$). The Cronbach's alphas for the two factors were acceptable ($\alpha \geq 0.72; \alpha \geq .82$). Hypothesis 1 was supported.

(Table 2 about Here)

Means, standard deviation and observed correlation are reported Table 3. We tested internal consistency by using Cronbach's alpha. The internal consistency showed acceptable reliabilities scores ($\alpha \geq 0.72$ to 0.80). However, interpersonal destructive deviance had a low reliability score ($\alpha \geq 0.67$). To investigate the relationship between the CDBS and theoretical correlated behaviors, we conducted bivariate correlation analysis. Results showed that interpersonal and organizational destructive deviance were positively related to interpersonal ($r = 0.27, p < 0.01; r = 0.21, p < 0.01$) and organizational CDBS ($r = 0.25, p < 0.01; r = 0.22, p < 0.01$). The magnitude of correlations between the two concepts was low. Hypotheses 2a and 2b were supported. Two low positive correlation between idea-generation and the two CDBS dimensions ($r = 0.21, p < 0.01$) were observed; supporting Hypothesis 3. Additionally,

moderate to strong correlations between PSRB and the two CDBS dimensions (from $r = 0.33$ to 0.52 , $p < 0.01$) were existing. Results showed higher correlation between PSRB dimensions and the CDBS organizational factor. Hypotheses 4a, 4b, and 4c were supported. We tested the relationship between OCB helping (Hypothesis 5a), OCB civic-virtue (Hypotheses 5b), and the two CDBS dimensions. No correlations were found between OCB helping ($r = 0.10$, $p = ns$; $r = 0.10$, $p = ns$), OCB civic-virtue ($r = 0.03$, $p = ns$; $r = 0.10$, $p = ns$), and the two CDBS dimensions. Hypothesis 5a and 5b were not supported. Concerning interpersonal destructive deviance, a positive correlation was observed with PSRB efficiency ($r = 0.19$, $p < 0.01$) and a negative one with OCB helping ($r = 0.11$, $p < 0.05$). Organizational destructive deviance was positively correlated to PSRB efficiency ($r = 0.26$, $p < 0.01$), PSRB co-worker ($r = 0.14$, $p < 0.05$), and PSRB customer ($r = 0.11$, $p < 0.05$).

(Table 3 about here)

II.6 DISCUSSION

This first study aimed to adapt the CDBS for a French population. Although the results showed a necessity for scale reduction, we can argue that the CDBS French translation satisfies our expectations and fits with the Galperin two-factor model. Despite the high correlation between the two constructive factors, the statistical analysis identifies the two-factor model as the better fit.

Results partially supported our hypothesis pertaining to the relationship between the CDBS and other theoretical-correlated variables. A positive relationship was observed between destructive deviance and CDBS dimensions (Hypothesis 2a and 2b). Moreover, the PSRB had a positive correlation with destructive deviance. As no correlation was observed between destructive deviance and other variables, the deviant nature of CDBS and PSRB were confirmed. The conceptual relationship between PSRB, CDBS, and destructive deviance could be interpreted by the violating characteristics of these three behaviors (see Galperin,

2012) and by the people's non-propensity to perform deviant behaviors (Galperin & Burke, 2006; Morrison, 2006).

Idea generation correlated positively with CDBS dimensions (Hypothesis 3). The low correlation between the two concepts could be explained by the fact that, commonly, few people are inclined to act toward a deviant purpose (Dahling et al., 2012; Morrison, 2006), and the norm-breaking or deviance implied in the innovation process is not directly measured in most of the innovation's models (e.g., Anderson et al, 2014; Janssen, 2000). Furthermore, idea generation does not require an active process of interaction with others (Perry-Smith & Mannucci, 2017); whereas constructive deviance involves direct action known to the organization or pairs.

The obtained results of the correlation analysis between PSRB and CDBS dimensions supported hypotheses 4a, 4b, 4c. The moderate correlation score indicates a strong relationship between CDBS and the PSRB. However, a strong correlation between them could also indicate an overlap of the concepts. Some CDBS items focus on rules and official policy rather than norms more generally, and so, it could be argued that PSRB scale owns similar items and conceptualization³.

The correlation analyses between OCB and the two CDBS Dimensions (Hypothesis 5a and 5b) did not confirm the previous results obtained by Galperin (2002, 2012). Our results suggest that there is no relation between the deviance process (deviance-related constructs, either constructive or destructive) and OCB extra-role dimensions. Furthermore, a low negative (PSRB efficiency and interpersonal destructive deviance), or inexistent (PSRB, organizational destructive deviance, and CDBS) correlation coefficient indicates the relative independence between concepts (John & Benet-Martinez, 2000). The non-replication of

³ As a sensitive check and according to the obtained results, we tested a five-factor model using MLR estimator in which each factor (PSRB efficiency, PSRB co-worker, PSRB customer, interpersonal CDBS, and organizational CDBS) was distinct and correlated with each other. We obtained acceptable fit ($\chi^2[125] = 251.612, p < 0.01$; RMSEA = 0.05; CFI = 0.94; TLI = 0.92; SRMR = 0.04; AIC = 14193.102) and the model outperformed thirteen alternatives models. Thus, it can be argued that each scale evaluates different constructs. The PSRB and constructive deviance intent to create CI, one by breaking rules and the other by breaking norms.

Galperin's results on the negative relationship between CDBS dimensions and OCB dimensions could be explained by differences across national or organizational cultures.

The study of CDBS correlates shows an interesting pattern of results. Indeed, CDBS is not related to the same magnitude to all the behavioral constructs studied. The more the constructs imply a clear deviation from the norms, the more CDBS is associated with them. In this respect, relations are stronger with PSRB, weak with Idea-Generation and non-existent with OCB affiliate.

III STUDY 2

Study 2 aims to clarify the interrelationship between the concepts of the constructive deviance umbrella theory of Vadera et al. (2013). Constructive deviance supposes an organizational innovative process in which individuals wish to bring improvement in their organization but do it outside the boundaries accepted in the organization. To modify their environments, employees can act on their relational environment or by modifying the execution of their work task. Therefore, to analyze the Vadera et al. (2013) umbrella approach, we used relational and task perspectives that refer to "how jobs, roles, and tasks are more socially embedded than ever before, based on increases in interdependence and interactions with co-workers and service recipients" (Grant & Parker, 2009; p. 317). The relational perspective encompasses behaviors oriented to deal with supervisors and colleagues. The task perspective focuses on how behaviors allow to carry out job task. We ensured thus the principal coverage of CI behaviors. Following the results of Study 1, we hypothesized the existence of a second-order factor regrouping the following positive deviant behaviors: idea-generation, CDBS dimensions, and PSRB (efficiency & coworking dimensions). We also introduce two behaviors with a potential deviant orientation, taking charge and voice (Potočnik & Anderson, 2016; Vadera et al., 2013). The proactive nature of

voice and taking charge should allow to better understand the relationship between deviant and proactive behaviors.

III.1 DISTINCTIVENESS OF CHANGE AND INNOVATION BEHAVIORS

The goal of this second study is to establish whether the selected behaviors are different from each other. All of them belong to the constructive deviance "umbrella" theory (Vadera et al, 2013). Scholars already extensively studied them, except for the CDBS and PSRB dimensions. We kept in this study the same behaviors as in Study 1 (idea-generation, CDBS, and PSRB) and add voice and taking charge. A common relationship between each of these behaviors supposes a useful benefit to the reference group (Vadera et al., 2013). Moreover, voice, taking charge, and idea-generation are behaviors present in the constructive deviance umbrella and the CI theoretical approaches. Only PSRB (i. e., itself) and CDBS (i.e., counterproductive behavior) are constructs present in the umbrella approach. We did not retain from the constructive deviance umbrella theory three constructs: a) OCB affiliate (i.e., extra-role and prosocial behavior), according to results from study 1; b) whistle blowing, that is less likely to be observed according to its ideological nature which takes shape by the denunciation of extreme, illegal, and/or immoral behavior (Near & Miceli, 1985); and c) issue selling, according to Parker and Collins (2010) which highlighted that it did not belong to the same second-order factor (proactive strategic behavior) than voice and taking charge (proactive work behavior). Concerning taking charge, we use the original conception (Morrison & Phelps, 1999), which is a currently studied behavior (for recent studies, see Potočník & Anderson, 2016; Tornau & Frese, 2013). We choose to study the voice by its promotional approach including supportive voice and constructive voice. In the literature, the voice construct is essentially characterized by information sharing or comments to promote change without requiring challenging of the status quo (LePine & Van Dyne, 1998). However, expressing opinions, whether directed at improving or not, can affect relationships between individuals (Bashshur & Oc, 2015). In some cases, voice can lead others to perceive

the individual as deviant (Vadera et al., 2013). Furthermore, voice differs from other behaviors as it does not involve a necessary break with established standards. Specific authors, dimensions, and original definitions used in Study 2 are presented in Table 1. Each of these behaviors is separately studied in this research. Scholars explored the empirical (see Parker & Collins, 2010) and theoretical relationship (Vadera et al., 2013) for some of these behaviors.

To our knowledge, this research is the first to explore the relationships among all these behaviors, especially the interrelation between constructive deviant behaviors and other constructs. Therefore, we suppose each of the behaviors to be distinct from one another.

Hypothesis 6. Idea-generation, the CDBS (interpersonal and organizational), PSRB (efficiency and coworker aid), voice (supportive and constructive), and taking charge will be distinct from one another.

III.2 RELATIONSHIP AMONG CHANGE AND INNOVATION BEHAVIORS

Despite the distinctiveness of the studied behaviors, Vadera et al. (2013) argue for a gathering under a unique positive deviance umbrella higher-order construct. Their argument focuses on the fact that workers depart from norms with the intent to be constructive for the organization, others, or themselves. Thus, taking charge, voice, PSRB, and creativity should be part of a constructive deviance meta-dimension. For this study, we include the CDBS (Galperin, 2012) to these behaviors. Except for PSRB and CDB, the other behaviors are usually defined as CI-related constructs (Potočnik & Anderson, 2016), which, in some situations, could be characterized by a departure from the norms (Vadera et al., 2013). However, some studies show a strong link between, on the one hand, taking charge, voice, and innovative role (Parker & Collins, 2010), and, on the other hand, taking charge, voice, and personal initiative (Tornau & Frese, 2013). These relations could presume, at least, the existence of a second-order factor between taking charge and voice. Concerning the deviant perspective, PSRB has a positive correlation with counterproductive behavior (Dahling et al.,

2012). The same relation was observed with CDBS dimensions and destructive deviance (Galperin & Burke, 2006) but not with proactive behaviors.

The convergent validities observed in study 1 among some positive deviant indicators (e.g., proactive behaviors) in combination with the discriminant validity, linking destructive deviance to some types of positive deviances indicators (e.g., CDBS, PSRB) but not to other ones (e.g., proactive behaviors), suppose the existence of two second-order factors. Despite their constructive intent similarity, these second-order factors would reflect a fundamental distinction between the "potential" deviant behaviors (proactive behaviors), hereafter referred as "proactive work behavior," and the "original" deviant behavior, hereafter referred as "constructive deviant work behavior." As previously stated, two higher dimensions differently oriented toward organizational and individual CI should exist on a behavioral continuum. The *proactive work behavior*, defined as "taking control of and bringing about change within the internal organizational environment" (Parker & Collins, 2010; p. 637), supposes a possible departure from the norms in a mild way (a more conventional elaboration). The *constructive deviant work behavior* implies a total departure from the norms by a breaking process (a less conventional elaboration). We defined it as bringing about change by breaking the procedure and rules of the organization. Proactive work behavior and constructive deviant behavior should not be mistaken as a good/bad conceptualization of the CI process (Anderson et al., 2004; Warren, 2003); each higher factor aims to positively influence it. This procedure is not a construct drift (Potočnik & Anderson, 2016) by the fact that we have not renamed the existing constructs into two new dimensions. Taking charge, voice, and idea-generation are proactive behaviors that already exist on the proactive work behavior factor (Parker & Collins, 2010). The CDBS and PSRB dimensions are deviant behaviors that can exist on the constructive deviant work behavior factor. Following this line of thinking, we hypothesize the existence of two constructive higher-order factors grouping

CI-related and constructive deviance constructs rather than a single overarching umbrella construct.

Hypothesis 7a. Idea-generation, voice, and taking charge will load on a higher-order construct named proactive work behavior.

Hypothesis 7b. The CDBS' dimensions and PSRB's dimensions will load on a higher-order construct named constructive deviant work behavior.

III.3 METHOD

III.3.1 Sample and procedure

A new sample, composed of French workers ($n = 380$), allowed to test hypotheses 6, 7a, and 7b. Public (52%) and private sectors (48%) were represented in sample 2. The sample was composed of a high percentage of women (85%) with a mean age of 34 years ($SD = 10.16$). Most of them were employees (73%) and worked in similar job sectors as sample 1: trade (21%), management (25%), health (26%) and social services (28%). As for Study 1, we recruited the participants via social media.

III.3.2 Measures

We used the same scales as in Study 1 to measure CDBS, idea generation and PSRB (effectiveness and support for employee dimensions). All the Cronbach's alpha scales were acceptable ($\alpha \geq 0.68$ to 0.91; Table 4). Concerning voice and taking charge measures, participants responded on a Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree).

Voice. The Maynes and Podsakoff (2014) 20-item scale translated from French (Déprez, Battistelli, & Peña Jimenez, 2019) was used to measure voice behavior. It encompass four factors (five items for each): the constructive (e.g., "Frequently makes suggestions about how to improve work methods or practices"), the supportive (e.g., "Defends useful organizational policies when other employees unfairly criticize the policies"), the defensive (e.g., "Vocally opposes changing how things are done, even when changing is

inevitable”), and the destructive (e.g., “Often badmouths the organization’s policies or objectives”). For study 2, we targeted behaviors aimed at promoting and improving; thus, we conserved the supportive and constructive dimensions (see Maynes & Podsakoff, 2014). A self-report version of the measure was proposed.

Taking charge. The Morrison and Phelps (1999) scale was used to measure taking charge. The measure was composed of ten items (e.g., “This person often tries to eliminate redundant or unnecessary procedures.”) with a unidimensional factor. Following Parker and Collins (2010), the scale was adapted to be self-report rather than based on supervisor ratings.

III.3.3 Results

First, we performed correlation analyses. Table 4 shows correlations among the eight behaviors. High and moderate correlations indicated the potential models to test in our second-order CFA.

(Table 4 about here)

Second, we tested hypothesis 6, each behavior will be distinct from one another, we tested hypothesized and alternative models using CFAs on Mplus 7.4 (Muthen and Muthen, 2015) with MLR and Geomin rotation. Fit statistics for the tested models are shown in Table 5. Firstly, we conducted an analysis with a one-factor model (M1) in which all the items were loaded onto a single factor ($\Delta\text{CFI} = -0.39$; $\Delta\text{TLI} = 0.40$; $\Delta\chi^2[28] = 2049.98$, $p < 0.01$). M1 had poor fit indices, suggesting that the deviance concept has not only one dimension. Secondly, we conducted an analysis with two factors (M2) in which PSRB and the CDBS loaded onto one deviant factor, and voice, taking charge, and idea-generation items loaded onto one proactive factor ($\Delta\text{CFI} = -0.19$; $\Delta\text{TLI} = -0.19$; $\Delta\chi^2[27] = 1145.25$, $p < 0.01$). Analysis results showed poor fit indices for this model, suggesting that the construct dimensions were different from each other. Thirdly, assessing the link with the high correlation score between the two CDBS factors, the two PSRB factors, and the voice construct (Table 4), we analyzed a

five-factor model (M3A) with a unidimensional CDBS factor, a unidimensional PSRB and a unidimensional voice factors ($\Delta\text{CFI} = -0.06$; $\Delta\text{TLI} = 0.07$; $\Delta\chi^2[18] = 484.48$, $p < 0.01$).

According to the correlation results (Table 4), we analyzed a six-factor model (M3B), with a unidimensional CDBS factor, a unidimensional PSRB ($\Delta\text{CFI} = -0.02$; $\Delta\text{TLI} = 0.01$; $\Delta\chi^2[13] = 197.96$, $p < 0.01$). Models M3A and M3B showed better model fit indices, but the fit index scores were not acceptable. Finally, we conducted an analysis with an eight-factor model (M4A) in which each factor was distinct and correlated with each other. We obtained an acceptable fit to the data, suggesting that all the studied behaviors are separate constructs. Considering the CDB's potential unidimensionality observed by the correlation analysis (Table 4), we tested a last seven factors model (M4B) with a unidimensional CDBS factor ($\Delta\chi^2[7] = 133.83$, $p < 0.01$). Model M4B showed fit indices as acceptable as the M4A model. The Satorra-Bentler chi-square analysis and the AIC score ($\Delta\text{AIC} = -14.77$) suggest that the M4A model fitted better. In conclusion, the CFA showed that these behaviors were separate constructs, consistent with hypothesis 6.

(Figure 1 about here)

Finally, to assess the existence of two second-order factors (Figure 1), encompassing proactive work behavior (hypothesis 7a) and constructive deviant work behavior (hypothesis 7b), we performed CFAs (Table 5). The second-order analysis was based on the (M4A) eight-factor model. A single second-order factor (M5), named umbrella deviance construct was tested ($\Delta\text{CFI} = -0.07$; $\Delta\text{TLI} = 0.07$; $\Delta\chi^2[1] = 360.01$, $p < 0.01$). A two second-order factor (M6), named proactive work behavior and constructive deviant work behavior was tested. Another two second-order factors (M7), named relation (supportive voice, PSRB coworker aid, and interpersonal CDBS) and tasks (idea generation, taking charge, constructive voice, PSRB efficiency, and organizational CDBS) dimensions were also tested ($\Delta\text{CFI} = -0.07$; $\Delta\text{TLI} = 0.07$). Models M5 and M7 showed bad fit indices. Furthermore, the M7 model had

one of the first-order factors loading as greater than 1 in the higher dimension, suggesting a non-adjusted model. Only model M6 showed acceptable fit indices. We analyzed the differences between M4A and M6, model M4A showing better fit ($\Delta\text{CFI} = -0.01$; $\Delta\text{TLI} = 0.01$; $\Delta\chi^2[19] = 200.74$, $p < 0.01$). Marsh, Ellis, and Craven (2002) suggested analyzing the high similarities between two models, arguing that second-order models are better than first-order models. For our case, following the previous analysis, model M6 appeared to be acceptable and better suitable than model M4A. As shown in Figure 1, hypotheses 7a and 7b are supported.

(Table 5 about here)

IV GENERAL DISCUSSION

The purposes of our research were to propose a French-validated version of the CDBS and to determine whether second-order factors exist. First, despite the high correlation between the CDBS dimensions, we showed that the scale construct validity was verified. Our results confirm those of Galperin (2012) and reinforce the fact that "employees who engage in deviant acts that harm the organization or those within it also sometimes engage in deviant acts that benefit the organization" (p.3017). Validating the French version of this scale will also make it possible to assess the extent to which individuals will choose to move towards the adoption of constructive deviance behavior rather than other related behaviors. Second, in a field where there is a considerable growth in the use of behavioral constructs, we showed the existence of a two second-order factor. The two second-order factor model allowed us to better understand the relationship between behaviors oriented to CI.

As expected, correlations, first-order analysis, and second-order analysis suggested that our selected behaviors were different constructs and loaded in two higher-order factors (see Figure 1). The difference between the two higher-order factors highlights the specific nature of the studied behaviors that, even if they emerge from the same constructive intentions, load

into different behavioral expressions. As predicted, the taking charge, voice, and idea-generation loaded onto the same proactive dimension. On the one hand, these results are congruent with Parker and Collins' (2010) research, who first proposed the proactive work behavior label. On the other hand, we proposed that the PSRB and CDDBS loaded onto the higher-order factor constructive deviant work behavior. These results highlight the fact that CDDBS is not only a behavior that breaks the rules but also a behavior oriented towards change and innovation (Galperin, 2002). Furthermore, results on the low relationships between destructive deviance and PSRB are indicators of the difference between the constructive and destructive deviance intentions. To summarize, PSRB is a prosocial behavior that intends to make a positive act and succeed to it by breaking rules, unlike destructive deviance that break rules and norms, and which supposes harmful intent and acts (Robinson & Bennett, 1995).

The two second-order factors are in line with the Vadera et al. (2013) umbrella proposition and with the CI literature. First, this study has shown the existence of a relationship between deviant and proactive behaviors as proposed by Vadera et al. (2013). Second, the analysis of the difference between the concepts, by the study of first-order factors, was explored as suggested by Potočnik and Anderson (2016). However, the two second-order factor loadings supposed a disparity between them. These results contrasted with the constructive deviance umbrella conception that is supposed to encompass the different constructs into one higher-order factor. It seems, despite the moderate relation between the two higher-order factors, that there might be a problem in the conceptualization of constructive deviance umbrella behaviors. This could be explained as construct confusion. Our proposition argues that proactive work behavior refers to potentially deviant behaviors while constructive deviant work behavior refers to conceptually acted deviant behaviors. This repartition showed a disparity between the "original" and "potential" deviant action (Vadera et al., 2013) and could indicate a clear separation on the perception of the two factors. The

disparity between proactive work behavior and constructive deviant work behavior could be explained by their strategic nature. The proactive work behavior dimension involves a temporal forecast made before the assumed change (Potočnik & Anderson, 2016). Constructive deviance, on the other hand, implies a reaction to changes or situations already in place in the organization (Dahling et al., 2012; Galperin, 2002, 2012). The first would, therefore, have a predictive component and the second a reactive component. We argue that proactive work behavior occurs when workers are in a position where they can act on CI (whether or not they comply with standards/rules). Whereas, the constructive deviance work behavior occurs when workers are stuck in a situation where norms and rules obstruct their ability to act on CI. A common point is a necessity for divergent thinking (Anderson et al., 2004) aimed towards a positive intent that should facilitate constructive behavioral action. In conclusion, the confusion of concepts could be explained by the researchers' conceptual interest in encompassing all constructive divergent behaviors under a constructive deviance umbrella concept (Vadera et al., 2013), at the expense of an integration of deviant behaviors under the CI-related concept dimensions. The constructive deviant work behavior and proactive work behavior higher factors are propositions that could lead to the integration of behaviors that depart from the norms in a positive CI intent and initiate CI within the organizational context.

IV.1 LIMITATIONS AND IMPLICATIONS FOR FUTURE RESEARCH

Despite the contributions of this article, this research has limitations that must be considered. The use of self-reported of deviance behaviors has a further specific limitation, which is that this approach may artificially inflate some of the relations we found. Despite this limitation, some studies support the validity of self-report measures (Ones, Viswesvaren, & Schmidt, 1993). These behaviors require internal constructive intents in their realization, which could be difficult for others to evaluate.

Nevertheless, some of the scales contained strong terms like "violate" or "break," which could raise socially desirable responses. However, as specified by Dahling et al. (2012), workers who choose to act toward a prosocial deviant purpose should not show moderate responses in their ratings. Future research should consider the introduction of softer items to counteract potential desirability effects.

A third limitation is linked to the fact that we only selected some of the constructs proposed by the scholars. In the analysis, we did not include all the CI and constructive deviance umbrella proposed behaviors. The sample was too small to include all behaviors in our research, so we selected the primary constructs common to the CI and constructive deviance umbrella concepts. In the case of OCB, the construct was excluded from the analysis as it presented a low correlation with other constructs. Future research should examine the dynamic relation between OCB and the CDBS and identify the variables that influence the use of one of these behaviors more than the other. We also invite scholars to explore the interaction between taking charge, voice, idea-generation, CDB, PSRB, and the identified two second-order constructs associated with the intent to provide CI.

A fourth limitation is related to the nature of our samples for each study: essentially composed of female participant, half of the participant are from the public sector and one third of the participants are managers. Additional analyzes (i.e., correlation, ANOVA) were conducted and no significant effect was observed between these variables and the studied behaviors. Yet, future research should investigate some relationships between sample characteristics and our studied behaviors.

A final limitation refers to the non-investigation of the commonalities and points differences between the two second-order factors. We offer empirical evidence on a relationship among all the studied behaviors and the existence of higher factors, but we did not explore the common/divergent antecedents or consequences. As specified by Potočnik and

Anderson (2016), we recommend further research to explore the common and specific antecedents of the CI higher factors, a path already well mapped by Vadera et al. (2013). We make the same recommendations for the analysis of the divergent or common consequences of this study's constructs. For example, the CI-related constructs are dispositional and oriented towards constructiveness. Scholars should empirically explore the relationship between these behaviors and the idea-promotion and idea-realizations dimensions. A dynamic model should be considered to explain the innovative effects of proactive work behavior and constructive deviant work behavior (see Acharya & Taylor, 2012). Another point to detail would be the analysis of the dynamics underlying the establishment of behavior; scholars should explore the question of why an individual will develop a behavioral response corresponding to one factor rather than the other (Déprez, Battistelli, & Antino, 2019). The last area to explore is related to the timeline effect on the evolution of behaviors, which could depend on the organizational, team, and individual contexts.

V CONCLUSION

The contribution of our paper is the opening of a new approach. Indeed, the positive deviant behaviors should be integrated into the CI-construct analysis in further research. Furthermore, this study provides significant results like the CDBS adaptations that can be used within French contexts. Following the current research popularity on constructive deviance, future studies must analyze in detail the underlying processes of deviance and the organizational and attitudinal determinants or consequences of this concept.

REFERENCES

- Acharya, P., & Taylor, R. (2012). Innovative deviance: an investigation of the relationships between social control, creativity and innovation in organizations. *Academy of Business Research Journal, 1*, 49–58. Available at SSRN: <https://ssrn.com/abstract=2519799>
- Anderson, N. R., De Dreu, C., & Nijstad, B. A. (2004). The routinization of innovation research: A constructively critical review of the state-of-the-science. *Journal of Organizational Behavior, 25*, 147–203. doi: 10.1002/job.236
- Anderson, J. C., & Gerbing, D. W. (1984). The effect of sampling error on convergence, improper solutions, and goodness-of-fit indices for maximum likelihood confirmatory factor analysis. *Psychometrika, 49*, 155–173. doi: 10.1007/BF02294170
- Anderson, N., Potocnik, K., & Zhou, J. (2014). Innovation and creativity in organizations: a state of the science review, prospective commentary, and guiding framework. *Journal of Management, 40*(5), 1297–1333. doi: 10.1177/0149206314527128
- Bashshur, M. R., & Oc, B. (2015). When voice matters a multilevel review of the impact of voice in organizations. *Journal of Management, 41*, 1530–1554. doi: 10.1177/0149206314558302
- Battistelli, A. (2015). La recherche psychosociale sur le processus d'innovation individuelle et d'équipe : un bilan des connaissances. *Psychologie du Travail et des Organisations, 20*(4), 336-352. doi: 10.1016/S1420-2530(16)30021-8
- Battistelli, A., Galletta, M., Pothoghese, I., Pohl, S., & Odoardi, C. (2013). Promoting organizational citizenship behaviors: the mediating role of intrinsic work motivation. *Le Travail Humain, 76*(3), 205-226. doi: 10.3917/th.763.0205
- Bennett, R. J., & Robinson, S. L. (2000). Development of a measure of workplace deviance. *Journal of Applied Psychology, 85*, 349–360. doi: 10.1037/0021-9010.85.3.349
- Berry, C. M., Ones, D. S., & Sackett, P. R. (2007). Interpersonal deviance, organizational

- deviance, and their common correlates: a review and meta-analysis. *Journal of Applied Psychology*, 92(2), 410–424. doi: 10.1037/0021-9010.92.2.410
- Brislin, R. W. (1970). Back-translation for cross-cultural research. *Cross-Cultural Psychology*, 1, 185–216. doi: 10.1177/135910457000100301
- Brown, T. A. (2015). *Confirmatory factor analysis for applied research*. New York: Guilford.
- Browne, M. W., & Cudeck, R. (1993). *Alternative ways of assessing model fit*. Sage focus editions, 154, 136.
- Byrne, B. M. (2012). *Structural equation modelling with Mplus: Basic concepts, applications, and programming*. New York: Routledge.
- Chiaburu, D. S., & Baker, V. L. (2006). Extra-role behaviors challenging the status-quo. *Journal of Managerial Psychology*, 21(7), 620-637. doi: 10.1108/02683940610690178
- Chung, Y. W., & Moon, H. K. (2011). The moderating effects of collectivistic orientation on psychological ownership and constructive deviant behavior. *International Journal of Business and Management*, 6(12), 65–77. doi: 10.5539/ijbm.v6n12p65
- Coyle-Shapiro, J. A.-M., Kessler, I., & Purcell, J. (2004). Exploring Organizationally Directed Citizenship Behavior: Reciprocity or ‘It’s my Job’?. *Journal of Management Studies*, 41, 85–106. doi: 10.1111/j.1467-6486.2004.00422.x
- Dahling, J. J., Chau, S. L., Mayer, D. M., & Gregory, J. B. (2012). Breaking rules for the right reasons? An investigation of pro-social rule breaking. *Journal of Organizational Behavior*, 33, 21–42. doi: 10.1002/job.730
- Déprez, G. R. M., Battistelli, A., & Antino, M. (2019). Norm and Deviance-Seeking Personal Orientation Scale (NDPOS) Adapted to the Organisational Context. *Psychologica Belgica*, 59(1), 393. doi : 10.5334/pb.462
- Déprez, G. R. M., Battistelli, A., & Peña Jimenez, M. (2019). Version française de l’échelle de prise de parole de Maynes et Podsakoff. *Psychologie du travail et des organisations*,

25(4), 221-239. doi : 10.1016/j.pto.2019.10.002.

Desrumaux, P., Léoni, V., Bernaud, J. L., & Defrancq, C. (2012). Les comportements pro- et anti-sociaux au travail : validation de deux échelles de mesure et liens avec des inducteurs organisationnels et individuels. *Le Travail Humain*, 75(1), 55–87. doi: 10.3917/th.751.0055

Evans, W. R., Goodman, J. M., & Davis, W. D. (2011). The impact of perceived corporate citizenship on organizational cynicism, OCB and employee deviance. *Human Performance*, 24, 79–97. doi: 10.1080/08959285.2010.530632

Galperin, B. L. (2002). *Determinants of deviance in the workplace: an empirical examination of Canada and Mexico*. Unpublished doctoral dissertation, Concordia University, Montreal, Canada.

Galperin, B. L. (2012). Exploring the nomological network of workplace deviance: developing and validating a measure of constructive deviance. *Journal of Applied Social Psychology*, 42(12), 2988–3025. doi: 10.1111/j.1559-1816.2012.00971.x

Galperin, B. L., & Burke, R. J. (2006). Uncovering the relationship between workaholism and workplace destructive and constructive deviance: an exploratory study. *International Journal of Resource Management*, 17(2), 331–347. doi: 10.1080/09585190500404853

Grant, A.M., & Ashford, S.J. (2008). The dynamics of proactivity at work. *Research in Organizational Behavior*, 28, 3-34. doi: 10.1016/j.riob.2008.04.002

Grant, A. M., & Parker, S. K. (2009). 7 redesigning work design theories: the rise of relational and proactive perspectives. *The Academy of Management Annals*, 3(1), 317-375. doi: 10.1080/19416520903047327

Han, Y., Sears, G., & Zhang, H. (2018). Revisiting the “give and take” in LMX: Exploring equity sensitivity as a moderator of the influence of LMX on affiliative and change-oriented OCB. *Personnel Review*, 47(2), 555-571 doi: 10.1108/PR-05-2017-0152

- Henle, C. A., Giacalone, R. A., & Jurkiewicz, C. L. (2005). The role of ethical ideology in workplace deviance. *Journal of Business Ethics, 56*, 219–230. doi: 10.1007/s10551-004-2779-8
- Hershcovis, M. S., & Barling, J. (2010). Towards a multi-foci approach to workplace aggression: a meta-analytic review of outcomes from different perpetrators. *Journal of Organizational Behavior, 31*, 24–44. doi: 10.1002/job.621
- Hussain, I., Sia, S. K., & Mishra, P. K. (2014). Workplace deviance and the menace of some antecedents: a review of extant literature. *Indian Journal of Health and Wellbeing, 5*(7), 13-20.
- Janssen, O. (2000). Job demands, perceptions of effort-reward fairness and innovative work behavior. *Journal of Occupational Psychology, 73*, 287–302. doi: 10.1348/096317900167038
- John, O. P., & Benet-Martínez, V. (2000). Measurement, scale construction, and reliability. In H. T. Reis & C. M. Judd (Eds.), *Handbook of research methods in social and personality psychology* (p. 339–369). Cambridge University Press.
- Judge, T. A., Scott, B. A., & Ilies, R. (2006). Hostility, job attitudes, and workplace deviance: Test of a multi-level model. *Journal of Applied Psychology, 91*, 126–138. doi: 10.1037/0021-9010.91.1.126
- Kanter, R. (1988). When a thousand flowers bloom: structural, collective, and social conditions for innovation in organizations. In B. M. Staw, and L.L. Cummings (Eds.), *Research in Organizational Behavior* (Vol. 10, pp. 169–211). Greenwich, CT: JAI Press.
- Kline, R. B. (2016). *Principles and practice of structural equation modelling (Fourth edition)*. New York: the Guilford press.
- Korczynski, M. (2002). *Human resource management in service work*. Basingstroke, UK:

Palgrave Macmillan

- Kura, K. M., Shamsudin, F. M., & Chauhan, A. (2016). Organisational trust as a mediator between perceived organisational support and constructive deviance. *International Journal of Business and Society*, *17*(1), 1-18.
- LePine, J. A., & Van Dyne, L. (1998). Predicting voice behavior in work groups. *Journal of Applied Psychology*, *83*, 853-868. doi: 10.1037/0021-9010.83.6.853
- Marsh, H. W., Ellis, L., & Craven, R. G. (2002). How do preschool children feel about themselves? Unravelling measurement and multidimensional self-concept structure. *Developmental Psychology*, *38*, 376–393. doi: 10.1037/0012-1649.38.3.376
- Maynes, T. D., & Podsakoff, P. M. (2014). Speaking more broadly: an examination of the nature, antecedents, and consequences of an expanded set of employee voice behaviors. *Journal of Applied Psychology*, *99*(1), 87-112. doi: 10.1037/a0034284
- Meier, O., Brière, M. & Le Roy, J. (2019). Le rôle de la norme dans la performance individuelle des salariés : perspective de réductions des injonctions paradoxales organisationnelles. *La Revue des Sciences de Gestion*, *296*(2), 11-22.
doi:10.3917/rsg.296.0011.
- Mertens, W., Recker, J., Kummer, T. F., Kohlborn, T., & Viaene, S. (2016). Constructive deviance as a driver for performance in retail. *Journal of Retailing and Consumer Service*, *30*, 193–203.
- Merton, R. K. (1968). *Social theory and social structure*. New York: The Free Press.
- Morrison, E. W. (2006). Doing the job well: An investigation of prosocial rule breaking. *Journal of Management*, *32*, 5–28. doi: 10.1177/0149206305277790
- Morrison, E. W., & Phelps, C.C. (1999). Taking charge at work: extrarole efforts to initiate workplace change. *Academy of Management*, *42*(4), 403-419. doi: 10.2307/257011
- Muthen, L. K., & Muthen, B.O. (2015). *Mplus, user's guide. Seventh edition*. Los Angeles,

CA: Muthen & Muthen.

Near, J. P., & Miceli, M. P. 1985. Organizational dissidence: The case of whistle-blowing.

Journal of Business Ethics, 4, 1-16. doi: 10.1007/BF00382668

Ohly, S., & Fritz, C. (2010). Work characteristics, challenge appraisal, creativity, and

proactive behavior: A multi-level study. *Journal of Organizational Behavior*, 31, 543-565.

Ones, D. S., Viswesvaran, C., & Schmidt, F. L. (1993). Comprehensive meta-analysis of

integrity test validities: Findings and implications for personnel selection and theories of job performance. *Journal of Applied Psychology*, 78, 679–703. doi: 10.1037/0021-9010.78.4.679

Organ, D. W. (1988). *Organizational citizenship behavior: The good soldier syndrome*.

Lexington, MA: Lexington Books.

Paillé, P. (2009). Une réplique sur l'adaptation française des échelles de mesure de

citoyenneté organisationnelle de Podsakoff & MacKenzie (1994). *Les Cahiers Internationaux de Psychologie Sociale*, 82(2), 169-184. doi:10.3917/cips.082.0169.

Parker, S. K., & Collins, C. G. (2010). Taking stock: integrating and differentiating multiple

proactive behaviors. *Journal of Management*, 36(3), 633-662. doi: 10.1177/0149206308321554

Perry-Smith, J. E., & Mannucci, P. V. (2017). From creativity to innovation: The social

network drivers of the four phases of the idea journey. *Academy of Management Review*, 42(1), 53-79. doi: 10.5465/amr.2014.0462

Peterson, D. K. (2002). Deviant workplace behavior and the organization's ethical climate.

Journal of Business and Psychology, 17(1), 47–61. doi: 10.1023/A:1016296116093

Podsakoff, P. M., & MacKenzie, S. B. (1994). Organizational citizenship behavior and sales

unit effectiveness. *Journal of Marketing Research*, 31: 351–363. doi: 10.2307/3152222

- Pohl, S., Dal Santo, L., & Battistelli, A. (2012). Perceived organizational support, job characteristics and intrinsic motivation as antecedents of organizational citizenship behaviors of nurses. *Revue internationale de psychologie sociale*, 25(3), 39-52. Available at: <http://www.cairn.info/revue-internationale-de-psychologie-sociale-2012-3-page-39.htm>.
- Potočnik, K., & Anderson, N. (2016). A constructively critical review of change and innovation-related concepts: towards conceptual and operational clarity. *European Journal of Work and Organizational Psychology*, 25(4), 481-494. doi: 10.1080/1359432X.2016.1176022
- Robinson, S. L., & Bennett, R. J. (1995). A typology of deviant workplace behaviors: A multi-dimensional scaling study. *Academy of Management Journal*, 38, 555–572. doi: 10.2307/256693
- Reio, T. G., & Ghosh, R. (2009). Antecedents and outcomes of workplace incivility: implications for human resource development research and practice. *Human Resource Development Quarterly*, 20(3), 237–264. doi: 10.1002/hrdq.20020
- Scott, S. G., & Bruce, R. A. (1994). Determinants of innovative behavior: a path model of individual innovation in the workplace. *The Academy of Management Journal*, 37(3), 580–607. doi: 10.2307/256701
- Spector, P. E., Fox, S., Penney, L. M., Brursema, K., Goh, A., & Kessler, S. (2006). The dimensionality of counterproductivity: are all counterproductive behaviors created equal? *Journal of Vocational Behavior*, 68, 446–460. doi:10.1016/j.jvb.2005.10.005
- Spreitzer, G. M., & Sonenshein, S. (2004). Toward the construct definition of positive deviance. *American Behavioral Scientist*, 47, 828–847. doi: 10.1177/0002764203260212
- Tabachnick, B., & Fidell, L. (2012). *Using multivariate statistics* (6^h ed.). Boston: Allyn and

Bacon.

Tornau, K., & Frese, M. (2013). Construct clean-up in proactivity research: a meta-analysis

on the nomological net of work-related proactivity concepts and their incremental

validities. *Applied Psychology: an International Review*, 62(1), 44-96. doi:

10.1111/j.1464-0597.2012.00514

Vadera, A. K., Pratt, M. G. & Mishra, P. (2013). Constructive deviance in organizations:

integrating and moving forward. *Journal of Management*, 39(5), 1221–1276. doi:

10.1177/0149206313475816

Van Dyne, L., Cummings, L. L., & McLean Parks, J. (1995). Extra-role behaviors: In pursuit

of construct and definitional clarity (a bridge over muddied waters). In L. L. Cummings

& B. M. Staw (Eds.), *Research in organizational behavior* (Vol. 17, pp. 215-285).

Greenwich, CT: JAI Press.

Van Dyne, L., & LePine, J.A. (1998). Helping and voice extra-role behaviors: Evidence of

construct and predictive validity. *Academy of Management Journal*, 41, 108-119.

doi:10.2307/256902

Vigoda-Gadot, E. (2007). Leadership style, organizational politics, and employees'

performance: An Empirical examination of two competing models. *Personnel Review*,

36(5), 661-683. doi: 10.1108/00483480710773981

Warren, D. E. (2003). Constructive and destructive deviance in organizations. *Academy of*

Management Review, 28(4), 622-632. Available at:

<http://www.jstor.org/stable/30040751>

West, M. A. (1990). The social psychology of innovation in groups. In M. A. West & J. L.

Farr (Eds.), *Innovation and creativity at work: Psychological and organizational*

strategies (pp. 309–333). Chichester, England: Wiley.

West, M. A., & Farr, J. L. (1990). Innovation at work. In M. A. West & J. L. Farr (Eds.),

Innovation and creativity at work: Psychological and organizational strategies (pp. 3–13). Chichester, England: Wiley.

Yam, K.C., Klotz, A.C., He, W., & Reynolds, S.J. (2017). From good soldiers to psychologically entitled: examining when and why citizenship leads to deviance. *Academy of Management Journal*, 60(1), 373-396. doi: 10.5465/amj.2014.0234

Yildiz, B., Alpkın, L., Ates, H., & Sezen, B. (2015). Determinants of constructive deviance: the mediator role of psychological ownership. *International Business Research*, 8 (4), 107–121. doi: 10.5539/ibr.v8n4p107

Zoghbi-Manrique-de-Lara, P. (2010). Employee deviance as a response to injustice and task-related discontent. *The Psychologist-Manager Journal*, 13(3), 131–146. doi: 10.1080/10887156.2010.500256

Table 1. *Deviant and Change-Innovative Related Construct Theoretically Related to a Common Higher Order Factor*Tableau 1. *Construits déviants et construits du changement et de l'innovation théoriquement liés à un Facteur commun d'ordre supérieur*

	Principal Authors	Dimensions	Definitions	CI construct	Departure from the norms ^a	Construct use in sample 1	Construct use in sample 2
Encompassing construct theories							
CD umbrella approach	Vadera, Pratt, and Mishra (2013)		Behaviors that deviate from the norms of the reference group such that they benefit the reference group and conform to hypernorms.	_ ^b	Yes	-	-
CI related construct	Potočnik and Anderson (2016)		The field of CI covers all [...] aspects of individual, team, and organizational endeavors to bring about change for improvement within the organizations.	Yes	-	-	-
SO proactive behavior	Parker and Collins (2010)		Three higher-order proactive behavior categories [...] each corresponding to behaviors aimed at bringing about change in the internal organization.	Yes	Potentially yes	-	-
Variables used in the two studies							
Constructive deviance behavior	Galperin (2002) Spreitzer and Sonenshein (2004)	1. Interpersonal* [#] 2. Organizational* [#]	Voluntary behavior that violates significant organizational norms and in doing so contributes to the well-being of an organization, its members, or both.	Potentially yes ^c	Yes	Yes	Yes
Destructive deviance behavior	Robinson and Bennett (1995)	1. Interpersonal [#] 2. Organizational [#]	Voluntary behavior that violates significant organizational norms and in so doing threatens the well-being of an organization, its members, or both.	-	-	Yes	-
Innovative work behavior	Janssen (2000) West and Farr (1990)	1. Generation* [#] 2. Promotion 3. Realization	Intentional creation, introduction and application of new ideas within a work role, group or organization, in order to benefit role performance, the group, or the organization.	Yes	Potentially Yes	Yes	Yes
Organizational citizenship behavior	Organ (1988) Paillé (2009)	1. co-workers aid [#] 2. altruism 3. civic virtue [#] 4. sportsmanship	Individual behavior that is discretionary, not directly, or explicitly recognized by the formal reward system and that in the aggregate promotes the effective functioning of the organization.	Yes	Yes	Yes	-
Prosocial rule breaking	Dahling, Chau, Mayer, and Gregory (2012) Morrison (2006)	1. Efficiency* [#] 2. Co-worker aid* [#] 3. Customer help [#]	Intentional violation of a formal organizational policy, regulation, or prohibition with the primary intention of promoting the welfare of the organization or one of its stakeholders.	Potentially yes ^c	Yes	Yes	Yes
Taking charge	Morrison and Phelps (1999) Chiaburu and Baker (2006)	1. Taking charge* [#]	Voluntary and constructive efforts, by individual employees, to effect organizationally functional change with respect to how work is executed within the contexts of their jobs, work units, or organizations.	Yes	Potentially yes	-	Yes
Voice	Maynes and Podsakoff (2014) Van Dyne and LePine (1998)	1. Constructive* 2. Supportive* 3. Defensive 4. Destructive	Individual's voluntary and open communication directed toward individuals within the organization that is focused on influencing the context of the work environment.	Yes	Potentially yes	-	Yes

Note. [#]used dimensions in the study one analysis *used dimensions in the CFA analysis; ^aextract from the Vadera et al. (2013) table 1, p. 1225. ^bnon-include in the higher factor or non-used our studies; ^c according to Acharya and Taylor (2012) and Galperin (2002); CD = constructive deviance; CI = change and innovation; SO = second order.

Table 2. *Item loading from Confirmatory factor analysis of items*Tableau 2. *Scores factoriels obtenues lors de l'analyse factorielle confirmatoire*

Items	CDBI	CDBO
Did not follow the orders of your supervisor in order to improve work procedures. <i>Ne pas suivre les ordres de votre superviseur afin d'améliorer les procédures de travail</i>	.859	
Disobeyed your supervisor's instructions to perform more efficiently. <i>Désobéir aux instructions de votre superviseur pour effectuer votre travail plus efficacement</i>	.811	
Reported a wrong-doing to co-workers to bring about a positive organizational change. <i>Rapporter un méfait aux collègues de travail pour provoquer un changement positif</i>	.466	
Violated company procedures in order to solve a problem. <i>Enfreindre les procédures de l'entreprise afin de résoudre un problème</i>		.884
Bent a rule to satisfy a customer's needs. <i>Plier une règle aux besoins d'un client</i>		.798
Sought to bend or break the rules in order to perform your job. <i>Chercher à plier ou casser les règles dans le but d'effectuer votre travail</i>		.668
Departed from organizational policies or procedures to solve a problem. <i>S'écarter de procédures dysfonctionnelles pour résoudre un problème</i>		.580

Note: $n_1 = 300$. CDBI = constructive deviance behavior interpersonal; CDBO = constructive deviance behavior organizational.

Table 3. *Mean, Standard Deviation and Correlation among Deviant Behaviors and among Theoretical Correlate Behaviors*Tableau 3. *Moyenne, écart-type et corrélation entre les comportements déviants et entre les comportements théoriques corrélés*

	<i>M</i>	<i>SD</i>	1	2	3	4	5	6	7	8	9	10
1. DD interpersonal	1.62	.45	(.67)									
2. DD organizational	1.53	.35	.44**	(.72)								
3. CDB interpersonal	2.53	.83	.27**	.21**	(.72)							
4. CDB organizational	2.59	.80	.25**	.22**	.77**	(.82)						
5. I generation	3.51	.79	.08	-.07	.21**	.21**	(.77)					
6. PSRB efficiency	2.58	.90	.19**	.26**	.49**	.52**	.24*	(.73)				
7. PSRB co-worker	2.96	1.01	.07	.14*	.33**	.36**	.05	.55**	(.85)			
8. PSRB customer	3.09	.96	.10	.11*	.41**	.48**	.16*	.68**	.62**	(.81)		
9. OCB helping	3.36	.84	-.11*	-.08	.10	.10	.27**	.04	.08	.06	(.77)	
10. OCB civic virtue	2.90	1.07	.03	-.05	.03	.10	.30**	.11	.10	.07	.37**	(.78)

Note: $N = 300$; The Cronbach's alpha corresponds to the number in brackets; * $p < .05$, ** $p < .01$; DD = destructive deviance; CDB = constructive deviance behavior, I = innovation, PSRB = prosocial rule breaking, OCB = organizational citizenship behavior.

Table 4. *Mean, Standard Deviation and Correlation among Behaviors Used in the CFA.*Table 4. *Mean, Standard Deviation and Correlation among Behaviors Used in the CFA*

	<i>M</i>	<i>SD</i>	1	2	3	4	5	6	7	8
1. CDB interpersonal	2.46	.81	(.68)							
2. CDB organizational	2.54	.80	.72**	(.81)						
3. PSRB efficiency	2.61	.94	.46**	.49**	(.78)					
4. PSRB co-worker	3.24	.92	.40**	.39**	.59**	(.82)				
5. IWB generation	3.54	.73	.25**	.18**	.18**	.08	(.74)			
6. V constructive	3.41	.88	.34**	.28**	.21**	.12**	.56**	(.91)		
7. V supportive	3.40	.81	.21**	.16**	.16**	.11*	.32**	.62**	(.86)	
8. TC	3.75	.71	.230**	.20**	.20**	.09	.53**	.70**	.53**	(.91)

Note: $N = 380$; The Cronbach's alpha corresponds to the number in brackets; * $p < .05$, ** $p < .01$; CDB = constructive deviance behavior, PSRB = prosocial rule breaking, IWB = innovative work behavior, V = voice, TC = taking charge

Table 5. *Fit indices for first-order and second-order factor models*Tableau 5. *Indices d'ajustement pour les modèles factoriels du premier et du second ordre*

Model N.	Type	Model Description	χ^2	df	RMSEA	CFI	TLI	SRMR	AIC	χ^2 Difference
<i>First-order factor model</i>										
M1	FO	1-factor model in which all constructs dimensions item load on one underlying deviance factor	3725.333	629	.114	.53	.51	.13	36084.422	M1 vs M4A = 2049.98, $df=28$, $p < .01$; M4A better
M2	FO	2-factor oblique model in which idea-generation, voice and taking charge items load on one proactive factor and PSRB, CDBS items load on one deviant factor	2394.819	628	.086	.73	.72	.08	34555.149	M2 vs M4A = 1145.25, $df=27$, $p < .01$; M4 better
M3A	FO	5-factor oblique model in which each construct items load on respective unidimensional factor	1558.985	619	.063	.86	.84	.06	33616.554	M3A vs M4A = 484.48, $df=18$, $p < .01$; M4A better
M3B	FO	6-factor oblique model in which CDBS and PSRB load on respective unidimensional factor.	1229.428	614	.051	.90	.90	.05	33254.070	M3B vs M4A = 197.96, $df=13$, $p < .01$; M4A better
M4A	FO	8-factor oblique model in which each factor is distinct and correlated from each other	1112.023	601	.047	.92	.91	.05	33141.715	-
M4B	FO	7-factor oblique model in which CDBS interpersonal and organizational load on one CDB dimension, and each factor is distinct and correlated from each other	1136.492	608	.048	.92	.91	.05	33156.492	M4B vs M4A = 133.83, $df=7$, $p < .01$; M4A better
<i>Second-order factor model</i>										
M5	SO	8-factor oblique model with one H2 factor in which all the 8 factors load; same as M4A with 1 H2 factor	1649.134	621	.066	.84	.83	.11	33709.666	M5 vs M6 = 360.01, $df=1$, $p < .01$; M6 better
M6	SO	8-Factor oblique model with two H2 factor: proactive work behavior and constructive deviant work behavior; same as M4A with 2 H2 factor	1203.605	620	.050	.91	.90	.06	33209.088	M6 vs M4A = 200.74, $df=19$, $p < .01$; M4A better
M7	SO	2-factor oblique model with two H2 factor: relation and task orientation; same as M4A with two H2 factor	1676.368	620	.067	.84	.83	.16	33733.418	M7 vs M6 = no possibility to composed Sattora-Bentler Chi2 (Same df). M6 better (AIC)

Note: $N = 380$. FO = First-order model; SO = second-order model; RMSEA = root mean square error of approximation; CFI = comparative fit index; TLI = Tucker-Lewis index; SRMR: standardized root means square residual; AIC = Akaike information criterion; CDBS = constructive deviant behavior scale; PSRB = prosocial rule breaking.

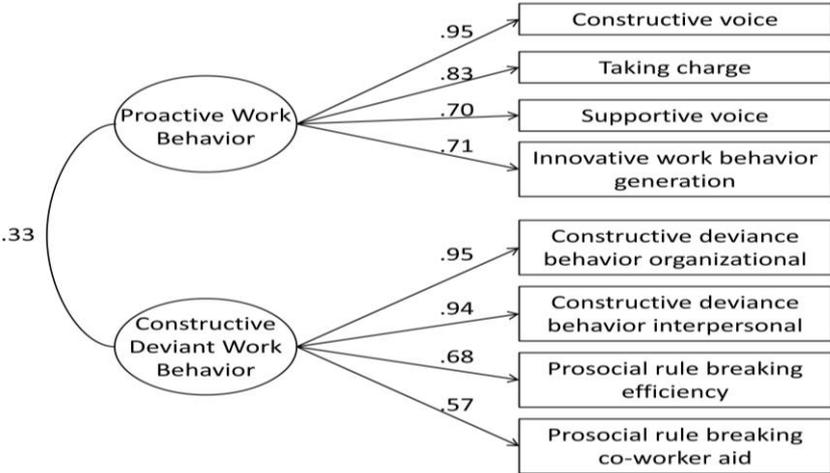


Figure 1. Second order factor model: 8-factor oblique model with two second-order categories of constructive behaviors.

Figure 1. Modèle factoriel du second ordre : Modèle oblique à 8 facteurs avec deux catégories de comportements constructifs du second ordre