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Towards Sustainable Organizations: Supervisor Support, Commitment to Change and the Mediating Role of Organizational Identification

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Abstract: According to psychology of sustainability, healthy organizations conduct successful businesses, regenerate employees' belongingness, and promote organizational and individual growth and change. In line with this assumption, this study investigates: a) The relation between perceived supervisor support and the affective, normative, and continuance components of commitment to change (CtC), and b) the mediating role of organizational identification on the relation between perceived supervisor support and components of CtC. Participants were 243 employees of a company that, in order to introduce a new organizational vision, was implementing multiple change initiatives. Results show the direct effect of perceived supervisor support on affective and normative CtC, the partial mediating effect of organizational identification on affective and normative CtC, and the full mediating effect on continuance CtC. Such results extend previous studies and are in line with the assumptions of the psychology of sustainability: Supervisor support can be considered as a primary preventive intervention that increases employees' belongingness and encourages them to commit to change initiatives.

Keywords: commitment to change; perceived supervisor support; organizational identification; psychology of sustainability

1. Introduction

Mergers, downsizing, new technology, and organizational restructuring impact employees' competences, sense of belongingness, overall well-being, and ultimately, their lives [1]. Managers that succeed in getting employees' commitment to changing goals, structure, procedures, or technology have better chances to decrease resistances [2] and introduce, with some success, those changes. However, this requires, as proposed by Huffington, Cole, and Brunning [3], that organizational changes aim to "... increase organization's health and effectiveness ... [and] integrate more fully the needs of the individuals with the purpose and mission of their organization, such that there is a better utilization of resources" (p. 20). This perspective is quite similar to the more recent psychology of sustainability and sustainable development approach [4,5]. According to this approach, sustainability and sustainable development concerns not only the ecological and socio-economic environment, but also the psychological one. While the traditional approach to sustainability is based on using a small quantity of resources, the psychological one is focused on regenerating resources and on the well-being of the person, of the environment, and of the person in the environment, which further means the well-being of persons within their organizations [5]. Considering that healthy organizations

also conduct successful businesses, psychology of sustainability proposes that increasing resources and strengths of employees is the best way to regenerate their belongingness to the company, and at the same time, achieve a healthy and more effective workplace.

In the present study, we consider supervisor support as an expression of the support and interest that organizations have towards their employees, and we argue that supervisor support may contribute to increase the relation that employees have with their organization and with the organizational changes that are introduced in it. For this purpose, we took into account commitment to change (from now on CtC) and organizational identification. Commitment to change is a special form of organizational commitment, which was defined by Herschovitch and Meyer as “a force (mind-set) that binds an individual to a course of action deemed necessary for the successful implementation of a change initiative” [6] (p. 475). These authors propose commitment to change as a multi-dimensional construct, composed of three dimensions: Affective, normative, and continuance commitment to change [6].

Much is known about the outcomes of CtC, whereas the role of managerial actions and leadership, as antecedents of CtC, received mixed support [7]. If, for instance, one study showed that transformational leadership had some impact on CtC [8], another one showed that transformational leadership had no effect while transactional leadership had a negative one [9]. Thus, considering the importance of relationships for the psychology of sustainability approach, according to the social exchange theory [10], and following previous research [10,11], the first aim of this study is to investigate if supervisor support is an antecedent of CtC. This study differs from that one conducted by Naotunna and Arachchige [11] because they took into account the impact of organizational support on CtC, whereas we consider the impact of supervisor support.

A previous study [12] considered the direct effect of supervisor support on the three dimensions of CtC; we build on that by analyzing the mediating role of organizational identification in the relation between these two constructs. Following the social identity theory, the second aim of this study is in fact to test if organizational identification mediates the relationship between supervisor support and commitment to change. The relation between organizational identification and organizational commitment has been extensively examined because of similarities between the two constructs [13] and the need to show their distinctiveness [14,15]. Some studies have already observed the mediating role of organizational identification on the relation between organizational support and affective organizational commitment [16,17], whereas, to the best of our knowledge, only two studies investigated the impact of organizational identification on affective commitment to change [18,19]. However, in the last two cases, identification was mediating the relation between justice of change and affective CtC [18,19]. Thus, the present study differs from the latter ones because it takes into account supervisor support (and not justice of the change) and the three dimensions of CtC (instead of just affective CtC). In conclusion, the theoretical contributions of this study concern an extension of the social exchange theory by considering the relation between supervisor support and CtC; moreover the present research also investigates if such relation is mediated by organizational identification. Third, the study takes into account the three components of CtC, and thus, it offers information on the multiple mind-sets that employees may activate in reaction to organizational change initiatives. Finally, such study contributes to the psychology of sustainability by addressing the role that supervisors may have in promoting employees’ identification and commitment to organizational changes, and thus, ultimately, in sustaining organizational wellbeing.

1.1. Commitment to Change and Supervisor Support

Commitment to change refers to a specific organizational commitment behavior [20]: The support to organizational change initiatives [6]. It indicates the extent to which “people want to see the change happen, and will do whatever is necessary to see that it does happen” [21] (p. 5). Employees’ commitment to change may take different forms or mind-sets: The affective, the continuance, and the normative ones. The affective mind-set refers to the desire of employees to provide support for a

change that is retained to be inherently beneficial; the normative mind-set refers to employees' sense of obligation to provide support for the change because it is morally right to support it; the continuance mind-set recognizes that it is better to support the change otherwise there will be costs related to the lack of support, such as retaliation by the company, or by colleagues [6].

Conner and Patterson [22] argued that the lack of commitment to change is the factor that most contributes to the failure of change projects and other studies indicate that commitment to change encourages employees' concrete support to change initiatives [23,24]. Thus, it is important to investigate antecedents of commitment to change in order to facilitate the implementation of change, and hopefully, organizational effectiveness and organizational sustainability.

Research on antecedents of CtC has given priority to characteristics of change and employees' perceptions of change [10], while studies on leadership and supervisor control have been limited over the years [7]. Managers and supervisors are the persons that quite often present the organizational changes to employees and studies show that transformational leadership is related to followers' commitment to change [8] and to the sustainment of employees' commitment to change over time [25]. Although less investigated, even the role of supervisor support has been examined and its impact on affective commitment to change has been explained using the social exchange theory [12]. This theory suggests that the support which supervisors provide by taking care and providing employees adequate supervision and training, is indicative of the benevolent orientation of the supervisor (and of the organization) toward the employees; supervisor support may satisfy employees' socio-emotional needs, create a sense of purpose and meaning for the work activities, and also a sense of obligation to reciprocate the attention showed by the supervisor [26]. Accordingly, we argue that employees that perceive their socio-emotional needs satisfied by the supervisor support will reciprocate such good treatment by positively accepting, adhering to, and supporting the indications and initiatives proposed by the supervisor, even when they do concern an organizational change developed by higher level management. Reciprocating a good and positive treatment is also considered a "cultural mandate" [10] and employees that want to maintain their "good name" will reciprocate supervisor support by normatively committing to a proposed change, because accepting or adhering to initiatives proposed by the management is part of the signed employment contract and employees are honor-bound to comply [7]. Similarly, employees that are well intentioned to reciprocate supervisor support will experience much less the need to adhere to the organizational change to "save their face" and reputation, and do not let-down their boss or colleagues [7]; in other words, to reciprocate supervisor support, employees will disregard or give less attention to the potential risks and costs associated to the limited support to the change. Thus, the more employees feel that their supervisor takes care and supports them, the more they will reciprocate such support by committing to the change initiative, and in particular, showing higher affective commitment to the change, higher normative, and lower continuance commitment to change. On the basis of this reasoning, we posit that:

Hypothesis 1: *Perceived supervisor support is related to commitment to change, and in particular it is positively related to affective commitment to change (H1a), positively related to normative commitment to change (H1b) and negatively related to continuance commitment to change (H1c).*

1.2. Commitment to Change and Organizational Identification

Social identity theory establishes that individuals define themselves using multiple social identities that can be more or less prominent in relation to the relevance of the targeted social context [27]. Employees that define themselves in terms of the organization they belong perceive a sense of "oneness with and belongingness" to that organization [28] and experience the organization's successes and failures as their own. Organizational identification has been described as involving both affective and evaluative aspects related to organizational membership [29]. Identified employees show more frequently extra-role behaviors and higher commitment with the organization and its members, help colleagues to solve work-related problems and contribute to maintain a climate that

fosters collaboration and conflict resolution [30]. Despite some debate on the similarity between organizational identification and organizational commitment, the two constructs are highly related, but distinct [13], and organizational identification is considered as an established antecedent of organizational commitment [15,17].

However, only two studies have investigated, up to now, to our knowledge, the relationship between organizational identification and commitment to change. The two studies, conducted by Michel, Stegmaier and Sonntag [18] and Soenen and Melkonian [19], however, took into account only affective commitment to change. According to social identity theory, employees who identify with the organization will take the organization's perspective and integrate organizational goals within their own ones [16]. Thus, we assume that if an organization decides to introduce a change, to solve some organizational problem or improve its performance, identified employees will consider the change as important for the organization, and for themselves, and will affectively commit to the change by desiring the successful implementation of it. Identified employees also incorporate in their self-concept values, norms, and interests of their organization [15]; consequently, when facing an organizational change initiative, internalized organizational norms, and the need to respect such norms, will result in the felt obligation to commit to the change in order to maintain coherence between organizational goals and norms and self-definition. Finally, employees who are identified with their organization are also more satisfied with their job and experience less turnover intentions [13]; consequently, we argue that identified employees will show a lower level of continuance CtC because they will not perceive the pressure or the potential costs related to their limited, or no, support to the change, or will consider such costs as less probable simply because they will be more proactively committed to see the change fruitfully implemented. Therefore, we hypothesize that:

Hypothesis 2: *Organizational identification is related to commitment to change, and in particular it is positively related to affective commitment to change (H2a), positively related to normative commitment to change (H2b) and negatively related to continuance commitment to change (H2c).*

Supportive organizations show concern for employees' welfare, convey the information that employees are valued, and consequently increase their sense of self-value and their organizational identification [31]. Two more recent studies showed that organizational identification mediates the relationship between perceived organizational support and affective organizational commitment [16,17]. We argue that such results, which concern organizational support, may be extended to supervisor support. Supervisors are in fact agents of the organization and they have responsibility for directing, rewarding, or punishing employees; the favorable (or unfavorable) orientation of supervisors towards employees, will thus be perceived as indicative of an organization's support [32]. According to social exchange and social identity theories, we argue that employees that perceive supervisor support, should perceive the sense of personal and organizational value, thus increasing the sense of identification and belongingness to it, which, in turn, will lead to higher level of commitment to change initiatives. We posit a direct effect of supervisor support on CtC and also an indirect effect, through organizational identification. Therefore, we hypothesize that:

Hypothesis 3: *Organizational identification positively and partially mediates the relationship between perceived supervisor support and commitment to change; in particular, it positively mediates the relationship between perceived supervisor support and affective commitment to change (H3a) and normative commitment to change (H3b), while it negatively mediates the relationship between perceived supervisor support and continuance commitment to change (H3c).*

2. Materials and Methods

2.1. Participants and Procedures

The study was conducted in an Italian company in the food and beverage sector in which the CEO, after the substitution of some managers, introduced a new organizational vision aiming to guide the company to become faster and more reactive to market and customers' needs. As a result, multiple change initiatives were implemented, as buying new machineries, realizing new products, internalizing the commercial agents (formerly working as external free-lancers) as full time employees, developing new commercial procedures (as visiting more often clients or advising them on the good use and maintenance of company's products), or developing a new internal code of conduct specifying rewards and punishments in case of bad behaviors.

In total, 243 workers (corresponding to a return rate of 78% of the total employees of the company) answered an anonymous questionnaire. Six of them were managers, while 104 worked in the operation, 21 in the administration, and 108 in the commercial and marketing department (4 of them did not answer this item). The average age of participants was 40.76 ($SD = 8.45$; $Min = 24$; $Max = 64$). Men were 84.2% of respondents, and seniority in the company was, on average, of 10.28 years ($SD = 8.57$), with men having on average three years of seniority more than women (respectively, $M = 10.81$; $SD = 8.68$; $Min = 0.3$; $Max = 31$; vs. $M = 7.61$; $SD = 7.56$; $Min = 0.1$; $Max = 29$; $t(221) = 2.09$; and $p < 0.05$).

The voluntary nature of participation in the study and modalities of treatment of data were reported in the questionnaire and clarified during the data collection, conducted by one of the authors.

2.2. Measures

Commitment to change: The three dimensions of commitment to change were assessed using the Italian version of the Herscovitch and Meyer [6] scale, consisting of 18 items—six items for each component of commitment to change. The standard translation-back-translation procedure, recommended by Brislin [33], was followed. Items were adapted in order to refer to the specific change program implemented in the company. A 7-point Likert scale was used to answer the items (1 = "Completely disagree" – 7 = "Completely agree").

Perception of supervisor support: The managerial support dimension of the Health, Safety, and Environment (HSE) Management Standards tool, validated into Italian [34], was used to measure supervisor support. This subscale is composed of five items that measure employees' perception of the support and encouragement received from the supervisor (e.g., "I am given supportive feedback on the work I do"). A 5-point Likert scale was used to answer the items (1 = "Strongly disagree" – 5 = "Strongly agree").

Identification with the Organization: Employees' identification with the company was assessed using the single visual item developed by Bergami and Bagozzi [35]. Participants had to indicate the degree of proximity between their own identity and their organization, represented by the two circles at different distances, from a total distance (1 = the two circles are distant from each other) to a complete superimposition (8 = the two circles perfectly match).

Control variables: We controlled for organizational tenure because, following previous studies [17,19], we argue that senior employees might be more identified with the organization and more committed to changes. In addition, as the changes were not impacting all the departments in the same way, we deemed it important to control for potential department effect. Accordingly, after removing the six managers from the dataset, we observed that employees working in different departments differ on organizational identification ($F(2, 229) = 11.41$, $p < 0.001$) and the three components of commitment to change (affective CtC: $F(2, 226) = 12.99$, $p < 0.001$; normative CtC: $F(2, 220) = 8.95$, $p < 0.001$; continuance CtC: $F(2, 215) = 4.11$, $p < 0.05$). Additionally, organizational tenure is significantly correlated with organizational identification and normative CtC, as shown below in the table reporting the descriptive statistics. The other demographic variables (gender and role) were not correlated with the mediating and the dependent variables and were not included as control variables.

2.3. Data Analysis

Cronbach alphas and multiple Confirmatory Factory Analyses (CFAs) were conducted in order to assess dimensionality, reliability and constructs' convergent and discriminant validity.

Descriptive statistics and correlations were then calculated. The mediation hypotheses were tested using the model 4 of the PROCESS Macro [36]. Bootstrap samples were set to 5000. In order to control for department effect, we computed two dummy variables, using the indicator coding, with commercial and marketing department as the reference category. Data analyses were run with SPSS 25.0 and AMOS 25.0.

3. Results

Before testing the hypotheses, constructs' dimensionality, reliability and validity were assessed. Following the procedure proposed by Hair, Babin and Anderson [37], we performed multiple CFAs to assess the dimensionality of CtC scale. We compared a single factor model, in which all items load on a single CtC factor, with a three-factor model, in which the three components are correlated, but independent dimensions. Table 1 reports the results of such analyses and shows the good fit of the 3-factor solution ($\chi^2(125) = 333.08$, $\chi^2/\text{df} = 2.66$; CFI = 0.90; IFI = 0.90; RMSEA = 0.08) in comparison to the one-factor model, which has a poor adjustment to data ($\chi^2(128) = 654.70$; $\chi^2/\text{df} = 5.11$; CFI = 0.73; IFI = 0.74; and RMSEA = 0.13). The two models are significantly different ($\Delta\chi^2(3) = 321.62$; $p < 0.001$).

Table 1. Fit indicator of Commitment to change and measurement model.

Models	χ^2	df	CFI	IFI	RMSEA	CI 90% RMSEA
Commitment to change (1 factor)	654.70	128	0.73	0.74	0.13	0.12, 0.14
Commitment to change (3 factors)	333.08	125	0.90	0.90	0.08	0.07, 0.09
Measurement model (1 factor)	1181.59	245	0.64	0.65	0.13	0.12, 0.13
Measurement model (5 factors)	484.87	236	0.91	0.91	0.07	0.06, 0.07

Note: n = 243. For each model, some error variances for items referring to the same CtC factor were allowed to correlate.

In order to test the common method bias, we performed CFAs to test the factorial structure of the measurement model. Table 1 also shows that a five-factor model (considering the three dimensions of CtC, supervisor support and organizational identification) has a better fit with the data ($\chi^2(236) = 484.87$; $\chi^2/\text{df} = 2.05$; CFI = 0.91; IFI = 0.91; and RMSEA = 0.07) than the single factor model ($\Delta\chi^2(9) = 696.72$; $p < 0.001$).

To investigate constructs' reliability and convergent validity, the composite reliability (CR) and the average variance extracted (AVE) of each scale were computed. Taking into account the established minimum of 0.6 and 0.5, respectively [37], CR and AVE values of affective CtC (CR = 0.86; AVE = 0.52) and supervisor support (CR = 0.85; AVE = 0.53) show a good convergent validity and internal consistency. Results concerning continuance (CR = 0.80; AVE = 0.41) and normative CtC (CR = 0.65; AVE = 0.28) suggest a good internal consistency, and a less satisfying convergent validity, especially for normative CtC. Thus, after removing three items, whose loadings were below 0.45, CR, and AVE of normative CtC become, respectively, 0.70 and 0.46.

Descriptive statistics, Cronbach's alpha and bivariate Pearson correlations are reported in Table 2. Cronbach's alphas are all above 0.70, confirming the good reliability of the scales. Such result is positive even for the continuance and normative CtC whose AVEs were slightly lower than 0.50. Averages show that observed values of affective commitment to change ($M = 5.14$; $SD = 1.38$) are similar to normative ($M = 4.98$; $SD = 1.06$) and higher than continuance ($M = 3.73$; $SD = 1.40$) commitment to change. Bivariate Pearson correlations show significant relationships among most of the variables in this study. In particular, affective CtC is related to both normative and continuance CtC (respectively, $r = 0.55$ and $r = -0.47$), while continuance and normative CtC are not interrelated. In addition, supervisor support is positively related to affective ($r = 0.39$, $p < 0.01$) and normative ($r = 0.36$, $p < 0.01$) commitment to

change, and negatively related to continuance ($r = -0.17, p < 0.05$) one. Furthermore, organizational identification is also significantly and positively related to affective ($r = 0.53, p < 0.01$) and normative commitment to change ($r = 0.43, p < 0.01$), while negatively related to continuance commitment to change ($r = -0.20, p < 0.01$), thus confirming hypotheses 1 (1a, 1b, and 1c) and 2 (2a, 2b, and 2c). Table 2 also shows that organizational tenure is significantly related to normative CtC and to organizational identification, but not to the other two components of CtC and supervisor support. Gender and role were not related to our mediating and dependent variables, and thus we tested our hypotheses controlling only employees' department membership and tenure.

Table 2. Descriptive statistics, bivariate Pearson correlations, and Cronbach alphas.

	M	SD	1	2	3	4	5
1. Affective commitment to change	5.14	1.38	(0.89)				
2. Normative commitment to change	5.14	1.32	0.55 **	(0.70)			
3. Continuance commitment to change	3.73	1.40	-0.47 **	-0.05	(0.81)		
4. Perceived supervisor support	3.64	0.86	0.39 **	0.36 **	-0.17 *	(0.85)	
5. Organizational identification	4.61	2.31	0.53 **	0.43 **	-0.20 **	0.32 **	
6. Organizational tenure	10.28	8.57	0.12 [†]	0.25 **	-0.13 [†]	0.01	0.16 *

Note: [†] $p < 0.10$, * $p < 0.05$, ** $p < 0.01$. Cronbach's alphas are on the diagonal (between brackets).

To test the third hypothesis, we ran three mediation analyses using the PROCESS Macro with 5000 bootstrap samples, controlling for tenure and department. In line with our hypothesis, supervisor support exerts a significant positive direct and indirect effect on affective CtC (respectively, $B = 0.42, p < 0.001$; and $B = 0.17, CI [0.06; 0.29]$) through organizational identification. Results show that organizational identification has a significant effect on affective CtC ($B = 0.25, p < 0.001; CI [0.18; 0.33]$) and partially mediates the relationship between perceived supervisor support and affective CtC, confirming hypothesis H3a. Mediation results are illustrated in Figure 1a. Tenure does not have a significant effect on organizational identification ($B = 0.04, n.s.$), and the department has a significant effect both on organizational identification ($B = 1.45, p < 0.05; CI [0.32; 2.58]$) and on affective CtC ($B = 0.67, p < 0.05; CI [0.10; 1.24]$). In particular, employees of the administrative department have a higher level of identification and affective CtC than those of the other two departments.

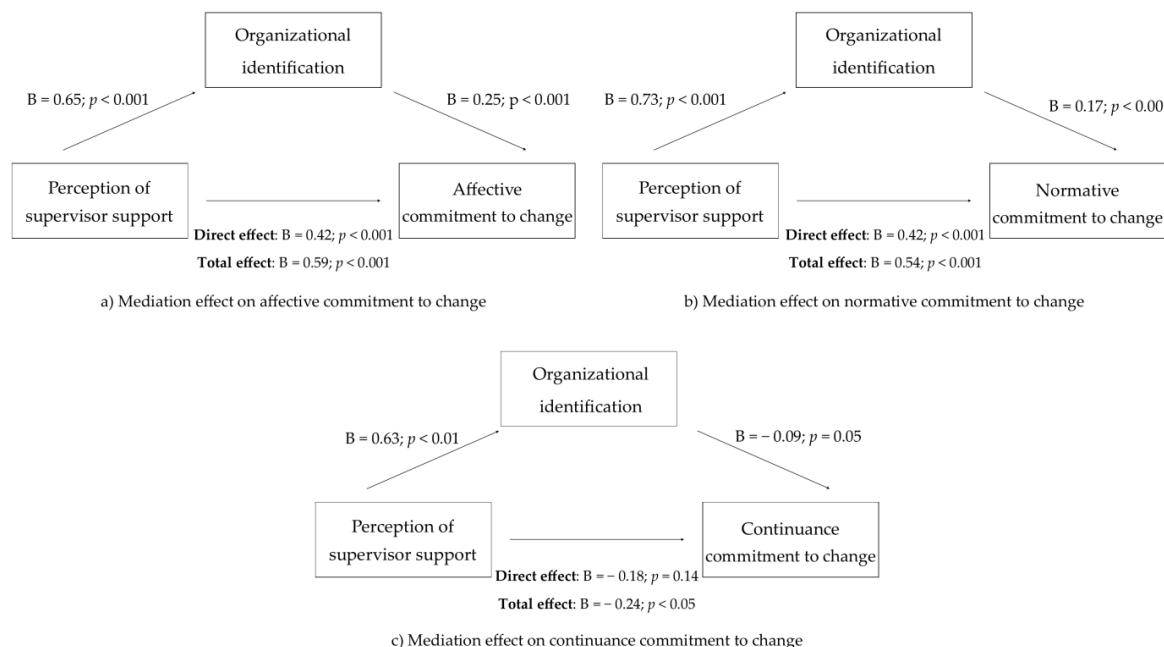


Figure 1. Mediation effect of organizational identification on the relationship between supervisor support and components of commitment to change.

Supervisor support exerts a significant positive direct and indirect effect on normative CtC (respectively, $B = 0.42$, $p < 0.01$, CI [0.21; 0.61]; and $B = 0.12$, CI [0.04; 0.23]) through organizational identification. Results show that organizational identification has an effect on normative CtC ($B = 0.17$, $p < 0.001$, CI [0.09; 0.25]) and partially mediates the relationship between perceived supervisor support and normative CtC (see Figure 1b), thus also confirming hypothesis H3b. Tenure is related only to organizational identification ($B = 0.04$, $p < 0.05$; CI [0.00; 0.08]). Departments affect only organizational identification ($B = 1.38$, $p < 0.05$; CI [0.29; 2.48]) but not normative CtC, with employees of the administrative department that have a higher level of identification with the company.

Finally, supervisor support exerts a significant direct effect on organizational identification ($B = -0.63$, $p = 0.01$; CI [0.25; 1.01]), but not on continuance CtC ($B = -0.18$; n.s.) (see Figure 1c). Organizational identification has a marginal effect on continuance CtC ($B = -0.09$, $p = 0.05$; CI [-0.18; 0.00]), which in any case does not allow confirmation of the hypothesis of partial mediation H3c. Even tenure has a marginal effect on identification ($B = 0.04$, $p = 0.05$; CI [0.00; 0.08]), while departments have an effect only on organizational identification ($B = 1.42$, $p < 0.05$; CI [0.29; 2.55]), and even in this case, it is the administrative department that has a higher level of identification than employees from the other two departments.

4. Discussion

The present research, using the social exchange theory, examined the effect of perceived supervisor support on affective, normative, and continuance commitment to change; in addition, referring to the social identity theory, we hypothesized the mediating effect of organizational identification on those relationships. Results confirmed the direct effect of perceived supervisor support on affective and normative CtC, the partial mediating effect of organizational identification on affective and normative CtC, and the full mediating effect of organizational identification on continuance CtC.

These results suggest that social exchange and social identity theories may explain employees' affective and normative mind-sets related to organizational change initiatives. In principle, organizational changes aim to increase organizational performance and effectiveness; however, to reach such goals, it is important that employees commit to the changes that are being introduced. For this purpose, and considering psychology of sustainability and sustainable development, it is also important that middle managers and supervisors, that represent the organization, devote time and effort to sustain those employees that have to go through the change and initiate new ways of doing things to exploit the advantages of organizational change. Supervisor support, a factor controllable by organizations, may provide important grounds for employees to affectively accept the change and adhere to it because it is "the right" thing to do. These mind-sets seem to be activated by employees' desire to reciprocate the interest showed by the supervisor, and indirectly by the organization. However, supervisor support does not seem sufficient to decrease, or discount, costs and risks associated to a limited support of the change. Employees that are critical towards the change, and consider offering a limited support to it, will require different interventions, than supervisor support, in order to change their mind and become more proactively involved in the change. These results are in line with previous studies [12] showing limited effects of supervisor support on continuance CtC, and stronger effect on affective and normative CtC.

Another effect of perceived supervisor support is the increase of employees' organizational identification. Such effect is remarkable, higher than 0.60, and although supervisor support was considered a hygienic factor, employees reciprocate the attention of the supervisor by increasing the attractiveness of the organization and the sense of belongingness to it [15]. Our results confirm previous studies [18,20] and extend them by showing that organizational identification is related not only to affective CtC but also to normative CtC, and to continuance CtC (it has to be underlined that this latter relationship, although not too strong ($B = -0.09$), had a p value of 0.050). Similarly, our study also extends previous studies [16,17] by showing that organizational identification partially mediates not only the relationship with organizational commitment, but also with the more specific commitment

to change. Employees that define themselves in terms of membership to their organization develop the affective and normative mind-sets that behaviorally orient them to support the change initiatives. According to sustainability perspective, the satisfaction for being member of a good company evolves in a meaning that supports change, and indirectly, may promote organizational and individual growth, enrichment, and development [5].

Our results do not confirm the partial mediating effect of organizational identification between supervisor support and continuance CtC, but results seem to suggest a total mediation effect. In this case, supervisors may indirectly decrease employees' perception of the costs, risks, or pressure to adhere to the change by increasing their sense of identification with the organization.

Finally, it has to be mentioned that such results are observed even after controlling for tenure and employees' department. In this study, administrative staff was more identified with the organization in comparison to blue collar and commercial agents. In addition, administrative staff was also affectively more favorable to the change, than employees in the other two departments. Thus, it seems that administrative staff, more in contact with managers, was more identified and also more committed to the change. Even organizational tenure has a small but significant effect on organizational identification, confirming that employees working longer with the company are more identified with it.

Such results can enrich the psychology of sustainability and sustainable development. Supervisors that provide support to employees may increase their wellbeing by facilitating their acceptance of the change and, also, their organizational identification, increasing organizational sustainability [5]. According to sustainability perspective, the satisfaction for being member of a good company evolves in a meaning that supports change, and indirectly, may promote organizational and individual growth, enrichment, and development [5]. In this sense, supervisor support can be considered a primary preventive intervention that increases personal resources and encourages employees to commit to change initiatives, therefore preparing them to face, in a more positive way, the uncertainties related to such changes.

Some limitations characterize this research, the first being the impossibility to generalize results to other countries or business sectors. Second, the cross sectional research design raises doubt about the possibility of considering the observed relationships as causal. Third, common method variance is also a concern, since all measures are self-reported, although the measurement models we tested show that the five factor model has a better fit than the single model. Fourth, the organizational change involved multiple initiatives implemented along a reasonable time frame; thus although we referred to the change as a whole, addressing it by using the same metaphor used in the company for the whole program, it is possible that different employees answered by referring to different parts of the change program. However, the consistency of results might suggest that this was not the case. A final comment concerns the normative CtC scale that we accepted as reliable because, although AVE was slightly lower than the suggested threshold, composite reliability and Cronbach's alpha were acceptable. Other studies report normative CtC reliability lower than the other two dimensions and an alpha lower than the customary 0.70 threshold [12,38]. Such results lead us to assume that this is not a limit of our study, but a peculiar psychometric property of the normative CtC scale, which needs to be more investigated.

Future studies should consider a longitudinal design, taking into account the stability of commitment to change as well as potential outcomes of it. In particular, according to psychology of sustainability, it might be interesting to consider commitment to change outcomes related to personal growth and development, as skill development, extension of the social network, or acceptance of the values and norms proposed by the change. In addition, it might be interesting to observe if different individual characteristics moderate the relationship between supervisors support and affective and normative CtC. Another future study might examine the relationships, if any, between the CtC to a whole program of change and to specific change initiatives that constitute the program. Considering that the relation between organizational identification and continuance CtC in this study was equal to $p = 0.05$, it might be interesting to repeat the study to investigate if a stronger relation is observed or

not. Finally, we believe it is worth to continue to investigate antecedents and outcomes of the three components of CtC, instead of focusing only on affective CtC, in order to make a more informed decision about similarities (or differences) of results among them. Practical implications of this study reside especially in the development of strategies to promote supervisor support and improve organizational identification. More concretely, the institution of meetings in which to encourage the discussion, between workers and supervisors, of task-related issues, to praise the good work or to provide suggestions on how to solve unanticipated tasks or the coming up changes may be useful strategies to address the question. Results of this study stress the importance of communication and exchange relationships and how such relationships can make the difference for organizational changes.

5. Conclusions

Unlike organizational commitment, commitment to change was introduced more recently and it has been less studied over time. This study contributes to enrich the existing scientific literature and shows that supervisor support has a direct effect on affective and normative commitment to change and also influences the three components of it through the mediating effect of organizational identification. Such results provide important practical implications because they suggest that organizational changes may pursue a double aim: from one side to increase organizational performance and from the other promote organizational wellbeing. When employees perceive that their supervisor supports and helps them, their own organizational identification is increased, and these two aspects do contribute to also increase employees' commitment to the change. Employees who are more identified and more committed to changes might also contribute to increase organizational psychological well-being and organizational sustainability.

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References

1. Oreg, S.; Michel, A.; Todnem By, R. *The Psychology of Organizational Change: Viewing Change from the Employee's Perspective*; Cambridge University Press: Cambridge, UK, 2013.
2. Erwin, D.G.; Garman, A.N. Resistance to organizational change: Linking research and practice. *Leadership Org. Dev. J.* **2010**, *31*, 39–56. [[CrossRef](#)]
3. Huffington, C.; Cole, C.F.; Brunning, H. *A Manual of Organizational Development: The Psychology of Change*; Psychosocial Press/International Universities Press: Madison, WI, USA, 1997.
4. Di Fabio, A.; Rosen, M.A. Opening the black box of psychological processes in the science of sustainable development: A new frontier. *Eur. J. Sustain. Dev. Res.* **2018**, *2*, 47. [[CrossRef](#)]
5. Di Fabio, A. The psychology of sustainability and sustainable development for well-being in organizations. *Front. Psychol.* **2017**, *8*, 1534. [[CrossRef](#)] [[PubMed](#)]
6. Herscovitch, L.; Meyer, J.P. Commitment to organizational change: Extension of a three-component model. *J. Appl. Psychol.* **2002**, *87*, 474–487. [[CrossRef](#)] [[PubMed](#)]
7. Jaros, S. Commitment to organizational change: A critical review. *J. Change Manag.* **2010**, *10*, 79–108. [[CrossRef](#)]
8. Herold, D.M.; Fedor, D.B.; Caldwell, S.; Liu, Y. The effects of transformational and change leadership on employees' commitment to a change: A multilevel study. *J. Appl. Psychol.* **2008**, *93*, 346–357. [[CrossRef](#)] [[PubMed](#)]
9. Conway, E.; Monks, K. HR practices and commitment to change: An employee-level analysis. *Hum. Resour. Manag. J.* **2008**, *18*, 72–89. [[CrossRef](#)]
10. Cropanzano, R.; Mitchell, M.S. Social exchange theory: An interdisciplinary review. *J. Manag.* **2005**, *31*, 874–900. [[CrossRef](#)]

11. Naotunna, S.; Arachchige, B. Perceived organizational support and non-managerial employees' commitment to change in Sri Lankan apparel firms. *S. Asian J. Hum. Resour. Manag.* **2016**, *3*, 40–57. [[CrossRef](#)]
12. Neves, P. Building commitment to change: The role of perceived supervisor support and competence. *Eur. J. Work Organ. Psychol.* **2011**, *20*, 437–450. [[CrossRef](#)]
13. Van Dick, R.; Monzani, L. Does it matter whether I am a happy and committed worker? The role of identification, commitment and job satisfaction for employee behavior. In *An Introduction to Work and Organizational Psychology: An International Perspective*, 3rd ed.; Chimel, N., Fraccaroli, F., Sverke, M., Eds.; Wiley Blackwell: Hoboken, NJ, USA, 2017; pp. 410–429.
14. Meyer, J.P.; Becker, T.E.; van Dick, R. Social identities and commitments at work: Toward an integrative model. *J. Organ. Behav.* **2006**, *27*, 665–683. [[CrossRef](#)]
15. Van Knippenberg, D.; Sleenbos, E. Organizational identification versus organizational commitment: Self-definition, social exchange, and job attitudes. *J. Organ. Behav.* **2006**, *27*, 571–584. [[CrossRef](#)]
16. Caesens, G.; Marique, G.; Stinglhamber, F. The relationship between perceived organizational support and affective commitment. *J. Pers. Psychol.* **2014**, *13*, 167–173. [[CrossRef](#)]
17. Stinglhamber, F.; Marique, G.; Caesens, G.; Desmette, D.; Hansez, I.; Hanin, D.; Bertrand, F. Employees' organizational identification and affective organizational commitment: An integrative approach. *PLoS ONE* **2015**, *10*, e0123955. [[CrossRef](#)] [[PubMed](#)]
18. Michel, A.; Stegmaier, R.; Sonntag, K. I scratch your back—you scratch mine. Do procedural justice and organizational identification matter for employees' cooperation during change? *J. Change Manag.* **2010**, *10*, 41–59. [[CrossRef](#)]
19. Soenen, G.; Melkonian, T. Fairness and commitment to change in M&As: The mediating role of organizational identification. *Eur. Manag. J.* **2017**, *35*, 486–492. [[CrossRef](#)]
20. Meyer, J.P.; Herscovitch, L. Commitment in the workplace: Toward a general model. *Hum. Resour. Manag. Rev.* **2001**, *11*, 299–326. [[CrossRef](#)]
21. Skilling, D. Beyond the quick fix: How to manage more effectively in the heart of change. *Ind. Commer. Train.* **1996**, *28*, 3–7. [[CrossRef](#)]
22. Conner, D.R.; Patterson, R.W. Building commitment to organizational change. *Train. Dev. J.* **1982**, *36*, 18–30.
23. Armenakis, A.A.; Harris, S.G.; Feild, H.S. Making change permanent a model for institutionalizing change interventions. In *Research in Organizational Change and Development*; Woodman, R., Pasmore, W., Shani, A.B., Eds.; Emerald: Bingley, UK, 2000; Volume 12, pp. 97–128.
24. Coetsee, L. From resistance to commitment. *Public Admin. Quart.* **1999**, *23*, 204–222.
25. Shin, J.; Seo, M.G.; Shapiro, D.L.; Taylor, S.M. Maintaining employees' commitment to organizational change: The role of leaders' informational justice and transformational leadership. *J. Appl. Behav. Sci.* **2015**, *51*, 501–528. [[CrossRef](#)]
26. Rhoades, L.; Eisenberger, R.; Armeli, S. Affective commitment to the organization: The contribution of perceived organizational support. *J. Appl. Psychol.* **2001**, *86*, 825–836. [[CrossRef](#)] [[PubMed](#)]
27. Ellemers, N.; Spears, R.; Doosje, B. Self and social identity. *Ann. Rev. Psychol.* **2002**, *53*, 161–186. [[CrossRef](#)] [[PubMed](#)]
28. Mael, F.; Ashforth, B.E. Alumni and their alma mater: A partial test of the reformulated model of organizational identification. *J. Organ. Behav.* **1992**, *13*, 103–123. [[CrossRef](#)]
29. Van Dick, R. Identification in organizational contexts: Linking theory and research from social and organizational psychology. *Int. J. Manag. Rev.* **2001**, *3*, 265–283. [[CrossRef](#)]
30. Ashforth, B.E.; Harrison, S.H.; Corley, K.G. Identification in organizations: An examination of four fundamental questions. *J. Manag.* **2008**, *34*, 325–374. [[CrossRef](#)]
31. Edwards, M.R.; Peccei, R. Perceived organizational support, organizational identification, and employee outcomes. *J. Pers. Psychol.* **2010**, *9*, 17–26. [[CrossRef](#)]
32. Eisenberger, R.; Stinglhamber, F.; Vandenberghe, C.; Sucharski, I.L.; Rhoades, L. Perceived supervisor support: Contributions to perceived organizational support and employee retention. *J. Appl. Psychol.* **2002**, *87*, 565–573. [[CrossRef](#)] [[PubMed](#)]
33. Brislin, R.W. Translation and content analysis of oral and written material. In *Handbook of Cross-Cultural Psychology*; Triandis, H.C., Berry, J.W., Eds.; Allyn & Bacon: Boston, MA, USA, 1980; pp. 398–444.

34. Balducci, C.; Romeo, L.; Brondino, M.; Lazzarini, G.; Benedetti, F.; Toderi, S.; Fraccaroli, F.; Pasini, M. The validity of the short UK health and safety executive stress indicator tool for the assessment of the psychosocial work environment in Italy. *Eur. J. Psychol. Assess.* **2017**, *33*, 149–157. [[CrossRef](#)]
35. Bergami, M.; Bagozzi, R.P. Self-categorization, affective commitment and group self-esteem as distinct aspects of social identity in the organization. *Brit. J. Soc. Psychol.* **2000**, *39*, 555–577. [[CrossRef](#)]
36. Hayes, A.F. *Methodology in the Social Sciences. Introduction to Mediation, Moderation, and Conditional Process Analysis: A Regression-Based Approach*, 2nd ed.; Guilford Press: New York, NY, USA, 2018.
37. Hair, J.F.; Black, W.C.; Babin, B.; Anderson, R. *Multivariate Data Analysis*, 7th ed.; Prentice Hall: Englewood Cliffs, NJ, USA, 2010.
38. Meyer, J.P.; Srinivas, E.S.; Lal, J.B.; Topolnytsky, L. Employee commitment and support for an organizational change: Test of the three-component model in two cultures. *J. Occup. Organ. Psych.* **2007**, *80*, 185–211. [[CrossRef](#)]



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