

## Examining the Impact of Buyer Power on Supply Chain Performance: The Mediating Effect of Supplier Satisfaction

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**Background and Purpose.** The ultimate measure of a firm's supply chain management is supply chain performance (SCP), that is, whether its customers are provided with an excellent product in terms of quality, cost, delivery, innovation, and flexibility (Terpend & Krause, 2015). Product quality, cost, delivery, innovation, and flexibility are also important metrics for monitoring and improving overall SCP in the global apparel industry (Su & Gargeya, 2016). Recent research indicates that several relationship factors could potentially affect SCP (Huo et al., 2017). Among these factors, studies have shown that a supply chain partner's (buyer or supplier) relationship satisfaction is a highly significant factor impacting overall SCP (Benton & Maloni, 2005). Given the importance of supplier satisfaction pointed out by Essig and Amann (2009), the purpose of this study was to examine the impact of buyer power on SCP while considering the mediating effect of supplier satisfaction.

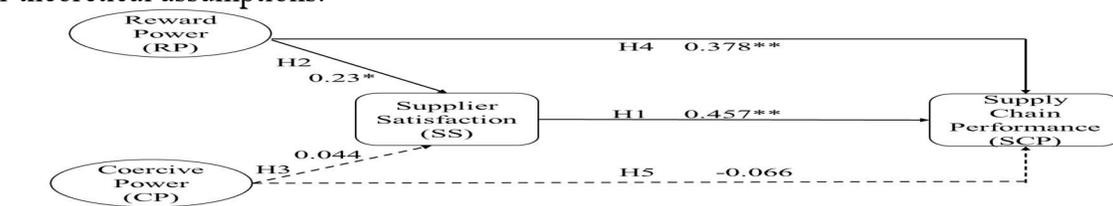
**Theoretical Framework.** Molm's (1991) relationship satisfaction theory and French and Raven's (1959) theory of social power bases were used as the theoretical lens for the study. French and Raven (1959) theorized five different bases of social power: reward power, coercive power, legitimate power, referent power, and expert power. Among these five social power bases, Benton and Maloni (2005) pointed out that reward power (RP) and coercive power (CP), are the most likely to be affected by other emotional factors (i.e., satisfaction) because of their impact on relationship outcomes (e.g., SCP; Leonidou et al., 2008). Therefore, it is important to examine the impact of buyer RP and CP on SCP as mediated by supplier satisfaction (SS). A mediation model was developed to illustrate the relationships between constructs important to this study (see Figure 1). Relationships between RP, CP, SS, and SCP were hypothesized, as was the mediating role of SS for the relationships between RP/CP and SCP (H1-H5).

**Method.** The survey-based research method was used to test the hypothesized relationships in the model. A total of 18 items were adopted from the SCP literature using a seven-point Likert-type scale. Translation and back-translation of the questionnaire were performed by the two researchers who are fluent in both English and Chinese (Zhao et al., 2008). An electronic version of the survey was generated using Qualtrics and distributed via WeChat. A purposive sampling approach was applied. Participants were apparel industry professionals in China and were contacted through the member directories of various local apparel business associations (Teddlie & Yu, 2007). A total of 1313 surveys were distributed and 419 responses were recorded by Qualtrics, yielding a response rate of 31.91%. After removing incomplete and invalid responses, the final sample consisted of 326 useable responses (24.83%) for further statistical analysis. Among the participants in the final sample (n=326), 52.15% were male (n=170) and 47.85% were female (n=156). Most

participants (83.34%, n=213) had more than three years of apparel industry experience. Participants represented a range of positions at different apparel firms, including junior- (33%, n=107), middle- (60%, n=196), and senior-level management (7%, n=23).

**Results and Discussion.** Statistical analysis was performed using structural equation modelling (SEM) in Mplus 8.0. Global fit of the hypothesized model was acceptable:  $\chi^2/df=3.22$ , RMSEA=0.079, CFI=0.92, TLI=0.88, SRMR=0.074. Zhao et al.'s (2010) mediation effect decision tree was followed to determine whether SS was the model's hypothesized mediator. As shown in Figure 1, the direct effect of SS on SCP was significant ( $\beta=0.457$ ,  $p=0.001$ ) and therefore H1 was supported. RP positively impacted SS ( $\beta=0.23$ ,  $p=0.039$ ) and SCP ( $\beta=0.378$ ,  $p=0.002$ ). The direct effect (H4) and indirect effect (H2 x H1) were both significant, indicating the mediating role of SS between RP and SCP. The significant indirect effect of RP on SCP through SS supported partial mediation (Zhao et al., 2010), because the direct effect of RP on SCP was significant as well. Whereas for CP, the hypothesized relationships of H3 ( $\beta=0.044$ ,  $p=0.677$ ) and H5 ( $\beta=-0.066$ ,  $p=0.898$ ) were non-significant and not supported by the data. Obviously, SS did not serve as a mediator between CP and SCP, as neither the direct effect (H5) nor the indirect effect (H3 x H1) were significant. This finding was unexpected, as previous studies (Caniels et al., 2018; Huo et al., 2017) suggest that CP should have a significant negative effect on SS and SCP. The overall results indicated that the buyer's use of RP has a positive effect on SCP. Although the buyer's use of CP showed no significant negative impact on SCP in the present study, as suggested by Benton and Maloni (2005), frequent use of CP by the buyer should be avoided, as it could negatively impact the overall buyer-supplier relationship.

**Implications and Future Research.** Findings of this study indicate that buyers can use RP as a more effective means than CP to prompt suppliers to agree to their requirements while maintaining SS. Findings suggest that the use of RP increased in importance when SS is considered as part of improving SCP. Buyers should therefore consider maintaining supplier satisfaction at a high level, which would help them improve SCP. Even though CP was found to have no significant impact on SCP, buyers should also consider limiting their use of CP, as it could create distrust on the part of their suppliers (Chae et al., 2017). This distrust could be potentially damaging to the buyer-supplier relationship and possibly compromise SCP. Because the sample was limited to the apparel industry context in China, generalization of the findings to other industries and countries should be made with caution. As Zhao et al. (2010) suggests, there may be more mediators "hidden" in mediation models. Future studies could examine whether there are additional mediators based on other theoretical assumptions.



Notes. The path coefficients in the figure are standardized parameter estimates. The solid lines represent the significant relationships; the dotted lines represent non-significant relationships. \* $p<0.05$ , \*\* $p<0.01$ .

Figure 1. Buyer Power and the Mediating Effect of Supplier Satisfaction.

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