With the current historical moment’s rapid growth in technology, many researchers think that the fashion industry is currently going through another major industrial revolution. Therefore, an examination of the product developments which can cross over and merge industrial boundaries is necessary to make sure that such disruption if happens brings better products to consumers through improved organizational behavior. To examine this in the context of the fashion and the wearable technology industries, this study examined the organizational behavior of product development teams in both of these spheres.

To examine these relationships, data were collected from product developers in both the conventional fashion and wearable technology industries using an online survey. Well-validated scales of Cronbach’s alpha higher than .6 were used to measure transformational leadership, sense of community, team learning behavior, and innovative work behavior. Structural Equation Modeling was used to examine the hypothesis and multigroup analysis was used to examine the group differences. As a result, the study had several major findings.

Transformational leadership was found to have a significant and positive impact on innovative work behavior in wearable product development teams, and this was significantly higher in the wearable technology product development teams than the conventional fashion product development teams. The impact of transformational leadership on team learning behavior was not significant for any of the groups. This is one of the most important findings of this study. It helps in understanding that transformational leaders alone cannot bring collaboration among team members. The leaders ought to make an environment that helps to create a sense of community within the team, which then positively impacts the team learning behavior for both the teams.

The collaborative behavior might or might not lead to innovative behavior, but in this study the relationship was positive and significant for both the groups. It was found that collaborative team learning behavior leads to innovative work behavior in product development teams. Therefore, construction and co-construction of knowledge, as well as constructive conflict within the teams, are highly essential for fostering idea generation, idea promotion, and idea realization in the product development phase.

This study is one of the first studies to quantitatively examine the collaboration between product developers in the emerging field of wearable technology. It provides several important contributions to social capital theory, which was used as a theoretical framework. It was found that the structural dimension of social capital (which was achieved with the help of transformational leadership) impacts the relational dimension (which was achieved by sense of community), and both of these dimensions then positively affect the cognitive dimension of Social Capital (which was achieved by team learning behavior). The importance of social capital and the interplay between all these dimensions to achieve innovative work behavior empirically substantiates the importance of social capital in the conventional fashion and wearable technology domains.

It also provides insights for product development managers who are either working in fashion or wearable technology or would like to crossover and adapt a more hybrid domain. Transformational leaders who
encourage team members with individualized consideration, intellectual stimulation, and idealized behaviors inspired innovative work behavior among the team members. Fashion and WT product development teams need to have transformational leaders to encourage team members and push them to achieve more positive outcomes through innovative work behavior. A workshop or seminar showing these important traits and designing activities to train a leader how to foster them could be good strategies to develop transformational leadership skills. The findings will also benefit product developers for conventional fashion and wearable technology industries. The relationship between the constructs in this study can give them a deeper understanding of organizational behavior and management strategies, which are meant for increasing their team learning behavior and innovative work behavior.

Further, the study has contributions for the education sector, as the workforce for product development must be trained effectively for the rapidly growing fashion discipline. The academic programs, which produce the workforce of this industry, should include modules on transformational leadership and train students how to function under and eventually become transformational leaders. Having a sense of community in the workplace was also found to be important. Therefore it is important to expand the comfort zone, to reach out and broaden the networks to understand those people who are from different academic backgrounds and with different tacit knowledge. This could be achieved in colleges and universities by taking part in events or projects from different disciplines. Professors are encouraged to plan such interdisciplinary events and projects where cognitively diverse team members participate in product development activities. This exposure will help them to understand people with different academic backgrounds and would eventually help in collaboration or team learning behavior.