

## Effects of virtual communications and social network on travel behavior: a case of university students of Mashhad and their social networks in Iran

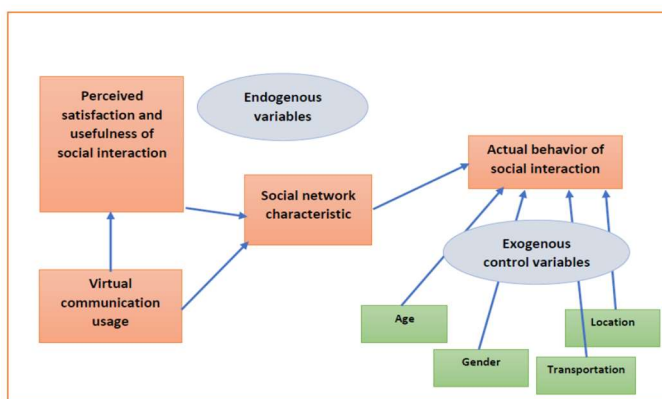
### Summary

Communication is a principal part of activity patterns and travel behavior. The diffusion of virtual communication into all features of social life has mainly impacted daily activities and related social interaction over the last decades and could be one of the main factors to explain travel behavior in the present and future. The distinctive factor of social interaction and associated travel is that they are essential and flexible at the same time. Therefore, there is a situation that an individual can actually decide whether to travel or not, with whom to travel, where to travel, how to travel and so on and so forth. Still, these interactions are frequently joint activities with the companion which they need maintenance that may involve social travel and consequently transportation use.

Hence, the study of social interaction can offer new insights into how social interaction effects communication, activity engagement, trip generation, and travel demand. The expansion of social contacts may or may not later lead to involvement in social activities, mobility and social travel. By developing qualitative and quantitative analyses, we provide empirical evidence of the impacts of virtual communication on activity-travel patterns to better realize social interaction, travel and its direct and indirect relationships between socio-demographic and landuse variables, ego-alter relationship, geographical distribution, the size of social networks, and the variety of communication modes including social media and instant messaging. For data collection, university students living in the urban area of Mashhad in Iran were chosen as a representation because similar studies in Iran or the Middle East is mostly absent. (...) The research highlights the importance and diversity of key factors underpinning the social travel referring to personal characteristics of individuals and their social network features, virtual communications use and social activity engagement. Moreover, theoretical evidence was found suggesting the influence of the residential location, tie strength and social network size features, the frequency of public and private transportation mode usage, diverse virtual mode choices to communicate, relative attitudes concerning satisfaction and usefulness of social communication and interaction which determine the actual behavior of face-to-face social interaction and travel. (...) To conclude, the main results comprise qualitative and quantitative evidence from this study exposed that there is a complementarity effect between social networks features and face-to-face social interaction and tend to change their travel behavior, increasing social events.

### Keywords

Virtual communication, social networks, social interaction, activity-travel patterns and behaviours, structural equations modeling, qualitative analysis of in-depth interview.



Total, direct and indirect effects between endogenous and exogenous variables in research model.



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