

Exploring Digital Resilience in Qatar: A Socio-Technical Perspective

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Background

Resilience is an ever-evolving concept adapted in various fields of study. Broadly, resilience involves bouncing back from a disruptive state. This study is interested in resilience as an individual's trait. In an individual level, resilience refers to the process of adapting well in the face of adversity, trauma, tragedy, threats or significant sources of stress.

Given the digital revolution witnessed in this epoch, individuals showed new forms of resilience through technical innovations. This new form of resilience in the digital space is known as "Digital Resilience". Digital resilience can be defined as the utilization of technology to change practices in order to adapt to new circumstances while retaining the underlying function of the practices.

Theoretical Gap

While the technical and organization readiness perspective to digital resilience attracted research attention, studies on the human aspect in an individual remains scarce. To address the knowledge gap, the study proposes the following research question: "What factors influence perceived digital resilience among individuals in Qatar?".

Research Method

Questionnaire items were developed following the 7-point likert scale. Items were taken from existing literatures and adapted in the context of this study.

The structural equation modelling (SEM) was selected with Partial Least Square (PLS) technique as a suitable instrument to pinpoint the relationship between variables leading up to the acceptance or rejection of the proposed hypotheses.

Quantitative empirical data will be collected through an online questionnaire using Qualtrics, distributed to over 300 people. 105 valid responses were received in this study. Data was collected from March 2021 to April 2021.

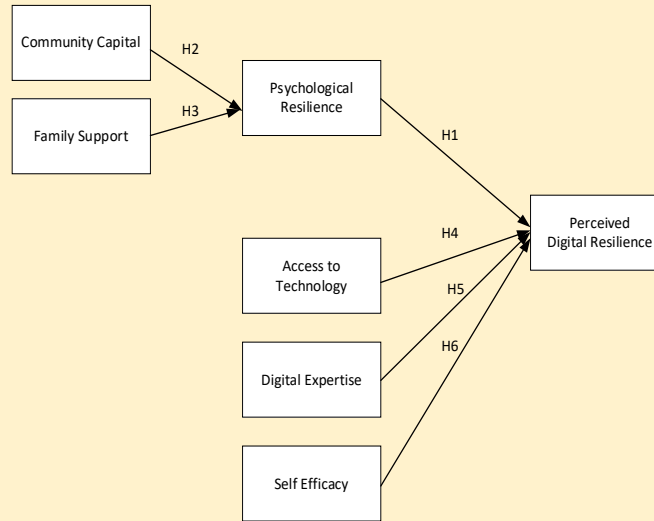


Figure 1. Proposed Conceptual Model

Proposed Model

Adopting the theory of psychological resilience capacity from Hua's (2018), our proposed model suggests that individuals need psychological resources to develop resilience, influenced by their community and family.

In addition to having a psychological resilience capacity, individuals must be technologically well-placed to adopt new technologies and engage in digital transformation. The proposed model, therefore, introduces three factors derived from existing various IT adoption theories that enable individuals to adopt IT as a resilience mechanism. Access to technology (Musa 2006), Digital Expertise and Self-efficacy (Sun and Jeyaraj 2013) play a role in the willingness and readiness of individuals to adopt technology for resilience purposes.

Results

Model Construct	Research Hypothesis	T Statistics	Significance	Result
Psychological Resilience	H1: Psychological resilience has a positive relationship with perceived digital resilience.	1.422	90% (0.1)	Accept
Community Capital	H2: Community capital has a positive relationship with building psychological resilience.	1.845	95% (0.05)	Accept
Family Support	H3: Family support has a positive relationship with building psychological resilience.	3.32	99% (0.01)	Accept
Access to Technology	H4: Access to technology has a positive relationship with perceived digital resilience.	3.272	99% (0.01)	Accept
Digital Expertise	H5: Digital expertise has a positive relationship with perceived digital resilience.	3.237	99% (0.01)	Accept
Self-Efficacy	H6: Self-efficacy has a positive relationship with perceived digital resilience.	2.005	95% (0.05)	Accept

Future Research

1- Participants: Only 105 valid responses were recorded. Future studies should focus on including more participants. Likewise, include a broader representation of the population since most of the participants in this study were employees aged 40-49.

2- Scope: This research did not touch on the cultural aspect of digital resilience in Qatar. Future studies should focus on this through the inclusion of cultural variables.