

## Unit 12:

# **The effects of continual disruption: technological resources supporting resilience in regions of conflict**

(Iraq, Gulf region and Israel)

# Introduction

- (ICTs) are changing the way that citizens are responding to environmental disruptions.
- In conflict zones it can be dangerous for people to travel and maintain their normal activities.
- With technologies such as the mobile phone and Internet applications, people can coordinate and communicate

# Technologies to aid resilient behavior

- Resilience
  - Ability to quickly recover from difficulties
  - how people ‘bounce back’ and persevere despite the situation
- During various types of disasters, ***people have improvised by altering their work locations***

- Wall Street trading organization moved to a temporary site following the September 11th attacks on the World Trade Center and resumed operations six days after the event.
- ***People improvise by modifying their work hours in order to accommodate growing needs***

- ***Resources also play a critical role*** in enabling resilient behavior. When disruption occurs, people often improvise the tools or equipment used to perform tasks.
- Resilience has been observed according to people's ability ***to improvise by assuming various organizational roles, or developing new roles***

# Research setting

- ***The Israel–Lebanon war*** (July 12, 2005 to August 14, 2006)
  - **sirens** notifying citizens of impending danger were altering the way in which people were accustomed to managing their daily lives. When people heard a siren, they would often halt what they were doing and flee to the nearest bomb shelter.
  - Lastly, many fled the impact area and sought refuge in other countries or safe zones within the south of Israel.

- ***Gulf War in Iraq(1980–88)***
  - The UN embargo (1990–2003)
  - ***Iraq was cut off from all technological development during this time.***
  - Iraqis had very limited access to ICTs during these years and were almost completely isolated from the world outside as a result of the strong censorship and monitoring of information flow by the Ba'ath regime in power at that time.

- Despite the challenges, there has been a widespread uptake of ICTs, especially cellular phones, since these technologies became available early in 2003.
- Major cities are reported to have relatively widespread access to the Internet and cell phones have been adopted by most demographics.
- Unlike Israel, however, the Internet and cellular networks are unreliable – our informants have reported that their communications networks do not work all the time.



# **Technological resources supporting resilience**

- Investigation revealed that civilians living in these war zones were highly innovative in their ability to maintain various aspects of their lives

## 1. TECHNOLOGY AND WORK COLLABORATIONS

- The informants have *adopted and re-appropriated technologies*, e.g. Internet and cellular phones, to conduct virtual work from safe locations, eliminating the need to travel to and from work in a dangerous environment.
- In fact, those informants whose work was the least disrupted had conducted virtual work before the war.
- For example, one Israeli engineer, who worked for a large distributed multinational corporation in distributed teams, was able to take his laptop with him
- He continued to participate in his distributed international team, even while in intensive training.

## 2. MAINTAINING A SOCIAL LIFE AMID 'SOCIAL DESTRUCTION

- Despite their inability to socialize in collocated settings, through the adoption and use of technological resources (e.g. the mobile phone, Instant Messenger and Facebook)
- But social trust had declined
  - Difficult to know who is your friend and who is your enemy

- MAINTAINING A SOCIAL LIFE AMID 'SOCIAL DESTRUCTION'
  - A new practice emerged :using technology to meet people online.
  - The new friends they made were located in various countries ranging from the United States and China to other Middle Eastern countries.
  - Some people even initiated romantic relationships with people they met online, one of which led to marriage.
  - This denotes a structural shift in Iraqi society, as traditionally people find suitable marriage partners through familial and friend-based connections.

### 3. CONTINUING EDUCATION WITH THE AID OF TECHNOLOGY

- Using CDs, flash ROMs, and message boards, students began to archive course materials.
- Students who missed class could then go to copy centers to pick up what they missed.
- If the Internet network was available, notes were also uploaded to a message board created by a medical student where students could provide updates on whether classes were to be held, as well as to discuss course material and share information.
- When students could not attend anatomy or pathology laboratories, they could obtain pictures of slides or dissections taken by students with digital cameras. These pictures were available on CDs. In these cases, students were proactive in using technological resources to continue their education.

#### **4. RESTORING INFRASTRUCTURE FOR TRAVEL**

- The cell phone is central in helping to organize the transportation, as well as figuring out the route to take.
- Practice of using cell phones to organize car pools with others in their community, place of study, or workplace.
- They developed trust-based travel arrangements where they would call friends from before the war and family members to seek trustworthy drivers who would not harm them.
- social networks to determine which routes to take when attempting to reach their destinations
- Less reliance on public media like announcements and TV

## 5. CROSS-CHECKING INFORMATION

- News from one source would typically be checked against that reported by another source from the same medium
- Cross-checks performed by an individual usually depends on how important the information is and the impact it will have on the individual's everyday activities.
- Information is also cross-checked against personal accounts of events by individuals within their personal social network.
- Several informants reported they would typically contact a friend or relative by cell phone, e-mail or Instant Messaging to verify a popular media report
- *rely on people. I rely on the people who were actually there, where the disturbance occurred*