DISRUPT THE ENEMY   1.A

Situation: Imagine the U.S. is no longer a superpower and an outside power has a controlling military presence in your town. While their numbers are not that large, they do have weapons and equipment that is much more advanced than anything available to the people in your town.

Challenge: What could you do as an individual to effectively disrupt the operations of this powerful military force in your town and more broadly?

Facilitator: Elicit different responses and lead discussion about their effectiveness. The intent is to promote perspective taking and generate a discussion about the enabling power of means such as social media to the individual and small groups.

SCS Concepts Covered: Multiple stakeholders, unintended consequences, second and third order effects.

SituationEx

UBER TIPPING POLICY   2.A

Situation: Uber is a leading rideshare company that allows users to catch a ride with a private car owner and pay for the ride directly through an app. While users can technically tip using cash, the tipping option was intentionally left out of the app as part of Uber's value proposition. After each ride, drivers and riders rate each other based their experience and ratings are visible to other drivers/riders. Uber's competitor, Lyft, provides an app to order rides and pay, but users can tip using Lyft's app.

Challenge: 1) Who are the key stakeholders in the rideshare industry? 2) How do their goals differ? 3) What are the goals and tradeoffs of Uber and Lyft business models? 4) Can you think of potential unintended consequences of Uber's policy? 5) If you were advising Uber corporate on this issue, how would you recommend they proceed?

Facilitator: Ask each question to the group, elicit responses from multiple participants, and promote discussion and exchange of ideas.

SCS Concepts Covered: Multiple stakeholders, goal conflict, unintended consequences.

SituationEx

CHINA'S ONE-CHILD POLICY   3.A

Situation: In 1979, the Chinese government enacted a one-child policy in an attempt to curb population growth. The policy was strictly enforced among urban residents with heavy fines for having more than one child. In rural areas, a family may have a second child after five years if the first child is a girl. The goal was to improve economic conditions and standard of living. However, there have been several unintended consequences. In 2015, the policy was changed to allow for two children per family.

Challenge: 1) Describe potential unintended consequences resulting from a one-child policy. 2) How might the situation look decades from now if most families start having two children? 3) What would you advise another government considering a one-child policy to curb population growth? 4) What else would you like to know to help you propose more comprehensive and sustainable interventions?

Facilitator: Ask each question to the group, elicit responses, and promote discussion and exchange of ideas.

SCS Concepts Covered: Multiple stakeholders, unintended consequences, supporting structures.

SituationEx

WAR ON DRUGS   4.A

Situation: When the U.S. and Sweden experienced an increase of heroin use, they adopted very different approaches to address the problem. In the U.S., Nixon declared drug abuse "public enemy #1" and adopted a "hardline" approach. This approach focused on drug prohibition, drug-production reduction, and drug-trafficker punishment. In contrast, Sweden took a "harm reduction" approach. This approach involved enforcement against drug users, but also establishing free addiction clinics where users could use heroine safely and receive medical treatment. Also, social workers helped users find steady jobs and housing.

Challenge: 1) Identify key stakeholders and their goals and motivations. 2) Identify similarities and differences between interventions. 3) Which intervention do you think should be more effective? Why?

Facilitator: Participants discuss each question in pairs first. Ask each member to advocate for one of the two approaches during their discussion. Then, all pairs share their answers with the rest of the class.

SCS Concepts Covered: Multiple stakeholders, leverage points, supporting structures.

SituationEx

1) Intended consequence – population growth has slowed down. Unintended consequences – working age population is decreasing, age dependency ratio is increasing (which is affecting pension, care of elders), increasing gender imbalance (which had led to difficulty for men finding brides, which has led to kidnapping brides in neighboring countries), increase in unapproved pregnancies and home births (which had led to more maternal deaths), adoptions for parents with a child became more expensive (which led to an increase in orphans), increase in Chinese women giving birth to their second child overseas, poor people cannot afford to pay the fine if they have more than one child (resulting in some cases of corrupt officials stealing their property).

2) If many families start to take advantage of the new 2-child policy, there may be an exponential growth in the population and a large population imbalance over the next couple of decades (a shrinking elderly population relative to the younger population). China's infrastructure and economy may not be prepared to handle a booming population.

3) Encourage urbanization because people who live in cities have less children. Focus on improving the country's standards of living and growing the economy. Consider the second- and third-order effects (and unintended consequences) that the policy may have on your country.

4) The country's current economic status, population history, ratio of gender and age, political situation, distribution of population across urban and rural areas.

This hypothetical situation resembles how some segments of the local population perceive U.S. military presence in their region. Adversaries of the U.S. around the world are leveraging social media to effectively disrupt U.S. forces with much more advanced capabilities. With the help of social media, individuals and small groups can have significant, broad-reaching impact on U.S. operations, influencing strategies and policies around the world.

The following incident illustrates the power of social media. In 2013, an adversarial group hacked into the Associated Press (AP) Twitter account and tweeted that an explosion at the White House injured President Obama. The tweet immediately reached nearly two million AP Twitter followers. Within two minutes, the stock market plunged nearly 150 points. The AP quickly confirmed that their account was hacked and the market immediately recovered. However, the incident highlights the wide-reaching power that social media represents.

The Arab Spring, which led to the end of Hosni Mubarak regime in Egypt and Muammar Gaddafi regime in Libya, would have been impossible without social media. It all started when a fruit vendor self-immolated in protest in Tunisia, but cell-phone videos shared through social media sparked subsequent protests around the region. The people in the region realized that they could organize and challenge existing powers using social media.

1) Government, law enforcement, drug users, drug traffickers, drug producers, hospitals, prisons, victims of drug crimes, families of drug users, social workers, employers, landlords.

2) The two interventions are drastically different in their assumptions about drug abuse. The U.S. intervention adopts an aggressive and punitive approach to eliminate drug trade and use. The rationale is that, if the supply is cut, then drug users will have to stop using. The Swedish intervention has a more positive view of drug users and it considers illegal-drug use to be the result of circumstances outside the user. The rationale is that, if the demand is cut by addressing some of the circumstances that lead people to seek illegal drugs, then drug supply will be reduced. Overall, the Swedish approach provides more 'supporting structures' to enable a sustainable intervention. For example, it first provides a free, safe environment, then helps secure income and housing. The U.S. approach views drug users more like criminals that are intentionally breaking the law and need punishment rather than rehabilitation.

3) The U.S. War on Drugs is considered a failure. It led to mass incarceration, increased violence, stronger drug cartels, and wasted tax payer dollars. Sweden's approach has been effective at reducing drug use while not resulting in the other unintended consequences of the War on Drugs. Importantly, the Swedish model enables drug addicts not only to overcome the addiction, but also to find a job and suitable housing so they can rebuild their life without the addiction.

There are many parallels between the War on Drugs and operational situations. The U.S. approach goes after the "bad guys" and tries to eliminate them, whereas the Swedish approach tries to strengthen the "good guys" so they do not need the "bad guys" anymore.

1) Uber/Lyft corporate, drivers, and riders, taxi corporate/ drivers/riders, taxi-equipment manufacturers, etc.

2) Uber/Lyft corporate needs BOTH drivers and riders to use their app. Drivers want to make a profit while enjoying a flexible schedule. Riders like the app convenience and (typically) lower prices than taxis. Taxi corporate and drivers want to eliminate 'unfair' competition from Uber/Lyft.

3) Both Uber and Lyft corporates are trying to be the leading rideshare company. Both need to appeal to and satisfy riders (who produce their revenue), while also recruiting and retaining drivers. Uber's no tipping policy aims at enhancing the rider's experience, but it can result in drivers feeling their income potential is being limited. Lyft's tipping feature may not thrill riders but it can motivate drivers. Even in Lyft's app, tipping happens after the ride is over (i.e., the driver is no longer around).

4) In some areas, Uber drivers encourage cash tips and 'punish' riders who do not tip with lower ratings. As a result, local riders are forced to carry cash to tip when using Uber and their ratings are closely linked to how often and how much they tip, hurting rider experience. This does not happen when tipping through the app (Lyft). These 'work-arounds' also increase confusion among riders on what the "right thing to do" is in a new location.

5) Do interventions try to align stakeholders' goals? Do they anticipate and address potential adaptations? Uber could include a tip feature in the app and find other ways to appeal to drivers that are less likely to impact drivers. Or they could retain the no-tip policy, but incentivize drivers in other ways (e.g., provide bonuses to drivers based on the ratings they receive – if well-designed, bonuses could be as lucrative as tips without impacting rider experience).

MASS INCARCERATION AND CRIME RATE **7.A**

Situation: The relationship between incarceration and crime rate is more complex than *more locked-up criminals = less crime*. From 1984 to 1991, incarceration and crime rates both increased. Lower-level criminals drove incarceration increases, reducing returns in crime reduction. Drug offenders were most impacted by the increase, but in a demand-driven drug market it is easy to replace street dealers with others seeking profit. Mass incarceration disrupts families and communities, increasing the risk of members engaging in criminal behavior and hindering reintegration of ex-prisoners.

Challenges: 1) Draw all stakeholders and their relationships. 2) How do stakeholders' goals conflict? 3) Discuss unintended consequences of incarceration. 4) Discuss alternative/complementary approaches to reduce crime? 5) What would be helpful to know to propose a better intervention?

Facilitator: Ask each question to the group, elicit responses from multiple participants, and promote discussion and exchange of ideas.

SCS Concepts Covered: Multiple stakeholders, goal conflict, interdependence and interaction, unintended consequences.

SituationEx

ISRAEL BODY MARKET **6.A**

Situation: In the Israel-Palestine conflict, Israel often keeps the bodies of Palestinians killed in Israeli territory and uses them as a bargaining tool to get Israeli captives back from Palestine. Proponents of this practice argue that Palestinian burials will only fuel more violence and attackers should not receive glory for their actions. When Israel does return bodies to Palestine, Israel requires quick and small funerals.

Challenge: 1) Draw all stakeholders in this situation and their relationships. 2) How do stakeholders' goals conflict? 3) How could this 'body market' practice lead to greater violence against Israel? 4) In 2009, controversy circulated about Israeli troops allegedly harvesting and selling organs from Palestinian bodies before returning them in the 1990s. How do you think this controversy would impact the situation?

Facilitator: Ask each question to the group, elicit responses from multiple participants, and promote discussion and exchange of ideas.

SCS Concepts Covered: Multiple stakeholders, goal conflict, interdependence and interaction, feedback loops, unintended consequences.

SituationEx

ADDITIONAL FACILITATOR INFORMATION — 7.B

1. Criminals, victims, families, friends, communities, other potential dealers, prisons, police, judicial system, government, advocacy groups, social workers, tax payers, employers, etc

2. Criminals' goals likely involve profit and the well-being of their family. Victims likely want criminals punished harshly. Other potential dealers can benefit from void. Police has to send more people to jail, which can damage relations with community members. Politicians want to appear effective to community.

3. Youth without resources or role models, vulnerable to engage in criminal behavior, weak family/community bonds and difficult reintegration, at-risk communities become poorer and less stable, high prison cost, little impact on violent or drug crime, politicians often persist to protect image with victims, community-police relations strained. Rather than reducing the number of criminals, incarcerated individuals are replaced by new youth and released individuals have trouble reintegrating.

4. Education of general public (esp. victims) about the (in)effectiveness of incarceration to reduce crime and its negative impact on communities and attitudes toward police. Combine incarceration for serious offenses with less punitive, rehab-oriented approaches for lower-level offenses. For drugs in particular, work toward reducing demand by providing affordable rehabilitation and reinsertion opportunities to drug users and dealers and addressing circumstances that lead people to illegal drugs: economic, social, mental health, shelter. Provide opportunities to 'serve time' within their community.

5. What has been effective elsewhere? (e.g., Swedish model) Relative cost of less punitive, community-oriented interventions.

ADDITIONAL FACILITATOR INFORMATION — 6.B

1) Israeli government, Palestinian government, Israeli soldiers, Palestinian fighters, Israeli families, Palestinian families, U.S. government, international community.

2) The Israeli government's goals are to bring Israeli captives back and prevent further violence from spurring at funerals. Palestinians want their loved ones' bodies to honor them and give them a proper Muslim burial. The U.S. government and international community want violence reduction.

3) Israel's strategy is likely to backfire and fuel more tension for several reasons. Some Palestinians feel that this practice puts Israel in the same category as Hezbollah or Hamas, who hold corpses for political gain. In addition, Palestinian families feel that the rights to their deceased loved ones are not being respected, they are being denied the right to honor their deceased ones as martyrs, and they do not know if Muslim burial rights are being respected in Israel. This angers Palestinians and incites even more tension and violence.

Potential reinforcing feedback loop: Israel holds Palestinian bodies → Palestinian families are outraged → Palestinians engage in more violent acts → More Israeli captives → Israel retaliates by holding more Palestinian bodies.

4) Regardless of its truthfulness, the accusation is going to exacerbate tension and deteriorate trust between Israel and Palestine. It will also reduce the chances that Israel can use Palestinian bodies as a bargaining tool successfully in later negotiations. Whenever Palestinian bodies are not returned for whatever reason, it will feed into the controversy's narrative.

If the accusation is true, it also adds a whole set of stakeholders benefitting from the organs (e.g., organ recipients, their families). This adds another layer of complexity that needs to be considered when intervening in the system.