Systems Analyses of Real Events Practical Exercise User's Guide



Julio C. Mateo, Michael J. McCloskey, Ava Santos,
LisaRe B. Babin, and Emily N. Polander

United States Army Research Institute for the Behavioral and Social Sciences

Fort Leavenworth Research Unit

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Authorized and approved:

MICHELLE L. ZBYLUT, Ph.D. Director

Technical Review by

Alexander Wind, U.S. Army Research Institute Thomas P. Guthrie, Center for Army Leadership

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Julio C. Mateo
Michael J. McCloskey
361 Interactive, LLC

Ava Santos
LisaRe B. Babin
U.S. Army Research Institute

Emily N. Polander 361 Interactive, LLC

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Systems Analyses of Real Events (SARE) is a practical exercise (PE) that draws from real world events to highlight sociocultural systems (SCS) concepts. The goals of SARE are to generate discussion among a group of participants, encourage systems thinking, promote new ways to think about complex events, and practice productive discourse.

This facilitator guide provides step-by-step instructions for running SARE PE sessions. The guide includes scripts and *Pro Tip* boxes that you, the facilitator, can use to walk participants through the exercise.

Exercise Overview

In SARE, participants will become acquainted with real world issues by watching videos produced by VICE News. VICE News is a publicly accessible, online media platform that contains short documentaries about current events, such as political corruption, international drug markets, and environmental concerns. The videos will expose participants to various complex issues around the world and the perspectives of involved stakeholders. Participants are provided with handouts, included in this guide, that contain video summaries and discussion prompts. The prompts will help participants critically think about the complex sociocultural issues that are presented in the videos. Supplementary online resources have been provided for each video as well. You will lead the final group discussion and debrief participants on the concepts presented in the video.

Running the group through more than one case, so that several SCS concepts are covered, is recommended. Tackling multiple cases will also provide participants with repeated practice in applying sociocultural systems thinking (SCST) skills to real world events.

The following learning objectives are supported in SARE:

- 1. Demonstrate understanding of the foundational theory of SCST. This understanding will include
 - 1.1. the range and nature of stakeholder groups in SCS,
 - 1.2. the structural characteristics of SCS, and
 - 1.3. the manifestations of SCS structural characteristics.
- 2. Demonstrate the ability to apply SCST skills. This application will include
 - 2.1. visually representing SCS interdependencies and the dynamic nature of SCS,
 - 2.2. examining multiple perspectives and historical background, and
 - 2.3. translating SCS concepts to envision promising, sustainable interventions.

When the *crawl, walk, run* analogy is used with respect to characterizing different stages of skill development, SARE is considered to fall under the *walk* stage. This stage is characterized by the ability of learners to apply SCST skills to real cases and a moderate ability to anticipate potential outcomes. At the *walk* stage, SCST is deliberate and effortful, but learners are able to use SCST when needed.

Topics for Discussion

This guide contains handouts and supplemental materials for seven specific VICE News video topics.

- 1. Peacekeepers Turned Perpetrators
- 2. Children for Sale
- 3. Cash for Kim
- 4. Synthetic Drugs
- 5. Schoolgirls for Sale in Japan
- 6. Afghan Money Pit
- 7. The Mafia Is Trashing Italy

Review the videos and supplemental materials in advance to verify that the topics to be covered with the group are timely and relevant. The videos range in length from 15 minutes to 1 hour. In addition, ensure that the SARE session can accommodate the length of the video, 1 hour for small group discussions, 1 hour for a large group discussion, and a break in the middle of the session.

You may also use real world events from other sources, whether the events are presented via video or another medium. If you choose to use a different case for SARE, note that topics are appropriate if they present issues that are complex, have significant implications, take place in various parts of the world, contain assorted stakeholders with disparate agendas, and do not possess an unambiguously correct answer.

Topics do not have to depend on military knowledge. In fact, most VICE News videos specified in this Research Product cover issues that do not directly involve the military. Tackling issues outside the national security domain may encourage Army leader participants to consider different and novel approaches when solving complex problems.

The discussion questions that participants are expected to answer individually and tackle in groups follow a general format:

- 1. identifying the relevant stakeholders and their connections to each other,
- 2. considering how the issue changed over time,
- 3. describing the potential second- and third-order effects,
- 4. determining the interrelated problems that are found within the issue, and
- 5. formulating interventions to address issues.

The general format of the questions is designed to point out significant characteristics of SCS. New or additional topics can work well with the rest of this guide if the topics possess SCS characteristics.

To learn more about SCST, with respect to the operational environment, the following anthology of chapters is informative:

Strong, B.E., Babin, L.B., Ramsden Zbylut, M., & Roan, L. (Eds.) (2013). *Sociocultural systems: The next step in Army cultural capability* (Research Product 2013-02). Fort Belvoir, VA: U.S. Army Research Institute for the Behavioral and Social Sciences

Preparation

Select which video to cover in the session by considering the following:

- 1. the SCS concepts to cover,
- 2. the domain to cover (operational vs. non-operational issue), and
- 3. the amount of time available (some videos are shorter in length).

To avoid biases that may come with domain familiarity, lead with non-operational videos.

SCS Concepts Covered in the VICE News Videos			
Boundaries	Interdependence and interaction		
Co-adaptive styles	Leverage points		
Goal conflict	Multiple players/perspectives		
Feedback loops	Second- and third-order effects		
Historical factors	Supporting structures		

Video	Domain	Length (minutes: seconds)
Peacekeepers Turned Perpetrators	Operational	23:09
Children for Sale	Non-Operational	20:40
Cash for Kim	Non-Operational	32:41
Synthetic Drugs	Non-Operational	14:45
Schoolgirls for Sale in Japan	Non-Operational	17:47

Afghan Money Pit	Operational	17:40
The Mafia Is Trashing Italy	Non-Operational	53:35

It is not necessary to be an expert on the topic, but you may find it helpful to familiarize yourself with the VICE news video prior to conducting a SARE PE session about the video. Watch the video ahead of time, review the video's supplemental resources, and think of potential answers to the video's discussion questions. Also, prepare prompts that can nudge participants toward answers.

Recommended number of participants	Up to 20 (break into small groups if there are more than 4 participants)	
Estimated run time	Approximately 2-3 hours per case	
Materials needed	Participant and facilitator packets	
	Monitor, projector, and laptop computers (for showing the videos)	
	Loudspeakers (if necessary)	
	Internet access	
	Printed copies of supplemental materials (if there are not enough laptops or phones for each group/Internet access)	
	Writing tools (for participants to take notes)	
	Whiteboard (to share and record group responses during group discussions)	
	Dry erase markers/erasers	

Pro Tip

Before the session, check the Internet connection, video player, projection, and sound capabilities.

Execution Guidelines

You may adapt some of the script language or other execution guidelines, depending on your personal style and available resources. However, the guide should be followed as closely as possible to ensure that participants receive adequate training on each of the concepts and objectives.

At the beginning of the session, inform participants about the nature and duration of the exercise. Then assign participants into teams for the first stage of the exercise while following these guidelines:

- 1. If there are 4 or fewer participants, each participant will work on his or her own.
- 2. If there are 5 to 10 participants, the group should be split into pairs. The group may also include a triad if there is an uneven number of participants.
- 3. If there are more than 10 participants, the group should be split into triads. The group may also include a pair if the number of participants is not divisible by 3.

Group members should sit together so that they can discuss the questions after the video.

Begin by briefing participants with the following:

You will all be participating in a group exercise where we will discuss various real-world issues and events, presented to you through VICE News videos. For each video, you will receive a handout containing questions for you to think about as you watch the video.

After assigning participants to small groups, distribute an *Introduction to Systems Thinking* and a SARE handout to each person. Make the following announcement:

During this exercise, you will be watching the VICE News video [insert case name here]. Before I start the video, I will give you about five minutes to look over the *Introduction to Systems Thinking* guide and the video handout. You may take notes during the video and refer to your notes later as you are answering questions. After the video, you will receive an additional set of questions. You will have up to an hour to answer the questions within your small group. You may choose to record your group's final answers on one person's guide, if that is more efficient.

After your small group work, we'll come back together as a larger group to discuss everyone's responses.

The exercise can be tailored depending on the time available for completion. If there are less than 2-3 hours available, cut the small- and large-group discussions below 1 hour each. However, we strongly advise against cutting the sections below 30 minutes each.

If there is more time available, you may bring up related articles, provided in this guide as supplemental resources, on the video topic. These articles contain information that may not have been presented in the video and will assist learners in answering some of the questions. You can assign group members to read these articles individually or as a group.

An alternative to having groups read through supplemental resources during the exercise is to assign everyone these readings ahead of time, if possible. There are several advantages to this approach. First, participants will have more context when they watch the video. Second, participants can spend more time digesting the information in the supplemental resources and incorporating the information into the discussions.

Before starting the video, ensure that participants understand the overview:

Do you have any questions at this point?

Once everyone has had about five minutes to look over the *Introduction to Systems Thinking* and the relevant SARE handout, start the VICE News video for the entire group.

After the video, give the groups approximately 1 hour for group work. If participants need more time after the hour, you may allow for additional time, at your discretion, to wrap up the final questions.

Pro Tip

If participants are having difficulty remembering any of the SCS concepts (e.g., feedback loops, co-adaptive cycles), provide them with a brief description and real-life example of the concept outside the video.

Leading the Larger Group Discussion

Once participants are finished with small group work, direct everyone's attention back to the larger group. Begin the large group discussion by asking one of the small groups to volunteer sharing their responses to the first question. A whiteboard is recommended so that participants can write or draw their responses for the entire group.

Also, announce expectations for group discussion up front:

Now that you've all had a chance to go through the questions in your small groups, we're going to take the next hour or so to discuss everyone's responses. I encourage you to come up to the whiteboard and write or draw your responses so that we can add to them as new responses are shared.

While each group/person is sharing their response, I would like you to think about ways to add to the response, to respectfully critique or ask questions, and to compare and contrast your own responses to others' responses. After a group has shared their response to a question, we will open up the discussion to the larger group for comments, questions, and additional responses.

Is there a group that would like to volunteer to share their responses to the first question?

If no one volunteers, select a group to share their responses. Once a group has started the discussion, we recommend going around the room and having a different group lead the discussion for each subsequent question. It is important to ensure that all groups are participating throughout the discussion.

Ideally, one group's response will generate a larger discussion among the whole group. As long as the discussion stays on topic, and it is possible to get through all of the questions in a reasonable amount of time, allow the discussion to continue.

Participants may give brief, incomplete, or surface-level responses. When this happens, follow up with deepening probes such as "And why might that be?" "Tell me more about that." "Is there anything else we can add to that?"

Pro Tip

For questions on interventions, ask participants to think about the desired system end state or goal. This will help participants establish boundaries and guide their ideas for interventions.

Discussion questions are closely connected to SCS concepts. Thus, you need to continuously link participant responses to these concepts to enhance learning. Try to ensure that all participants have a chance to participate in the group discussion.

Debrief Guide

The goals of the final debrief are to:

- 1. reflect on everything that has been discussed,
- 2. revisit any challenging concepts, and
- 3. discuss the usefulness of the PE in the context of understanding and managing systems.

Below are some sample debriefing questions to generate discussion. Try to ask open-ended questions that cannot be answered in one or a few words, or questions that do not have a definite answer. Also, allow participants to express their thoughts fully.

- 1. Which concepts did you find easiest to think about? Which ones did you find most challenging? Why?
- 2. How did these discussions help you to understand systems, or to think about complex situations differently? How did the discussions help you to think about strategies for managing systems?
- 3. How can these concepts help you to think about complexity in operational settings or situations?
- 4. Think back to some of the concepts that were discussed. Can you give examples of these concepts in an operational setting?
- 5. What are some of your big takeaways from these discussions?

There are many definitions of systems thinking. According to Senge (1990), systems thinking considers how events tend to be part of a larger system and are related to each other, although such relationships may not be initially apparent. Gharajedahgi (2013) characterized systems thinking as focusing on the importance of thinking about issues as a complex system that is larger than just the sum of its parts. Sackett, Karrasch, Weyhrauch, and Goldman (2016) defined systems thinking as understanding how a variety of elements and domains in a complex and dynamic environment are interrelated and contribute to form a coherent whole. These various definitions of systems thinking have multiple commonalities, the main one being that things do not occur in a vacuum. Rather, things occur in relation to other things, and a change to one thing may result in changes to other things. Thus, it is important to be mindful about how things come together and form a system.

Discussion of systems thinking, a cognitive process, necessitates familiarity with the following components of systems:

1. Adaptive and fluid

7. Self-organizing

2. Complex

8. Altered by goal conflict and competition for resources

3. Multidimensional

9. Influenced by **feedback loops**

4. **Open**, not closed

10. Affected by historical factors

5. **Purposeful**

11. Differentially changed by leverage points

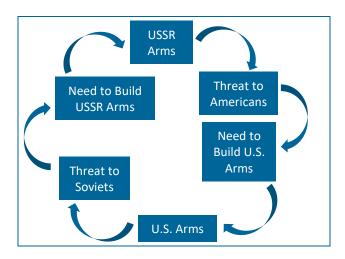
6. **Counterintuitive**

12. Depicted by patterns of change

Bolded terms can be found in the glossary. The glossary is included in this Research Product to help you become better acquainted with components that should be considered when trying to understand a complex system.

By considering the components of a system, decision makers can formulate more effective courses of action based on a more holistic picture of the operational environment and dynamic situation. For instance, Senge (1990) presents an intriguing example: the nuclear arms race between the U.S. and Union of Soviet Socialist Republics (USSR). Senge describes the beginning of the arms race as the result of both countries' shared suspicion regarding each other and the potential threat of attack. Each country saw the other as the aggressor and in response began building its nuclear capability as a defensive reaction to the perceived threat.

"The systems view of the arms race shows a perpetual cycle of aggression" (Senge, 1990, p. 71). Each country responds to achieve a short-term goal of establishing a sense of security. However, through the actions of both countries, the long-term result is the exact opposite: more insecurity and more fear. This positive feedback loop feeds the fear and strengthens the defensive response to a potentially dangerous end state for both countries. Senge states that this situation is an example of dynamic complexity where one has to appreciate and understand the interrelatedness and patterns of change inherent to the system.



Another important characteristic of a system is whether the system is *open* versus *closed*. Gharajedahgi (2013) explains that in closed systems there is no influence from the environment. No energy, information, or influence is shared outside of the system. An analogy of a closed system is a computer network with no Internet access. This type of computer network comprises only the machines on the network and the interactions between the machines. Completely closed systems are rare, but as boundaries become more arbitrary or affected by the surrounding environment, the more the system becomes open. Returning to the computer analogy, an open computer network is one that exists with Internet access; the network is affected potentially by every other computer that may not be part of the same computer network but is also connected to the Internet. It is important to understand the distinction between open and closed systems. The more open the system, the less the ability to control the system. We must rely instead on influencing the system. This is where leverage points play a significant role in understanding and manipulating systems.

Senge (1990) states that "the bottom line of systems thinking is leverage – seeing where actions and changes in structures can lead to significant, enduring improvements" (p. 114). The problem though is that the leverage point is not usually obvious. In fact, often the obvious answer leads to the outcome opposite to the expected outcome, as in the arms race example. An in-depth examination of Senge's research identifies several processes to consider when identifying leverage points in a system. Things to consider are cause and effect relationships within the system, the pattern of change inherent to the system, identifying facts versus assumptions about the system, stakeholder motivations and connections inside and outside of the system, and points of tension, competition, and error that might occur in the future as the system develops. These are the aspects of a system that we will focus on in this practical exercise.

For this activity, we do not expect you to be a systems thinking expert. Our goal is to introduce the topic of systems thinking and give you the opportunity to practice applying the concepts to complex problems. In fact, you may already be familiar with some of the concepts, even though you may not recognize the specific names.

Systems Thinking Glossary

Adaptive – systems will change in reaction to influence from inside and outside the system.

Assumption – preconceived notions about how things in a system, or even the system as a whole, work. These notions may or may not be supported by facts, and the notions may be so deeply ingrained within the system that it is easy to rely on them without awareness of their existence.

Cause and effect relationship – changes in one part (A) of the system results in changes to another part (B) of the system. Moreover, the changes in B may lead to further changes in A.

Competition – when multiple parties seek the same resources, and one competitor obtaining the resources leads to another competitor losing access to the resources. Parties may use various strategies to increase the likelihood that they, and not the other party, will obtain the resources.

Complex – systems have many parts that are connected to each other in a wide variety of ways. Moreover, systems tend to be interconnected with other systems. Oftentimes, there are many parts and connections that are not obvious. These system characteristics make it near impossible to completely understand the system.

Counterintuitive – the expected result of one's action is the opposite of what was expected because cause and effect are not always unidirectional and many actions have second- and third-order effects that are often unforeseen.

Error – unintended events within the system that cause unsatisfactory effects.

Feedback loop – a factor influences a part of the system that in turn impacts the factor, creating a continual connection that results in a positive or a negative effect on the system. A positive feedback loop enhances or increases the change, while a negative feedback loop suppresses the change related to the system's equilibrium.

Fluid – instead of being static, systems are easily changed by influences inside and outside them. These changes can be frequent and unexpected.

Goal conflict – recognizes that individuals within and outside of a system have different goals and interests, and that some of these goals likely conflict with one another. Often, it is not obvious how goals are at odds with each other. It is important to consider various stakeholders' agendas and goals.

Leverage – influence on the system that creates a specific outcome. This influence often comes from an indirect manipulation of the system. A small manipulation has the potential to result in large gains.

Multidimensional – indicates that influence in a system can flow through several different elements, entities, or variables in the system. For example, the direction of influence can change the system at different times and in different environments. Multidimensionality also refers to how system elements or entities are interdependent and how effects can become causes, which may result in unknown implications on the system.

Open – when a system interacts with the environment beyond the system's boundary.

Patterns of change – repeating, coherent movements in the system. These movements arise from recurring rearrangements of system elements or entities. We may be able to predict movements by observing how past movements are arranged. When we recognize a pattern of change, we may use the pattern as a clue to decipher points of influence and leverage.

Purposeful – events happen in a system for various reasons. Such reasons may be deeply embedded in culture, emotion, intention, or a combination of these and more reasons.

Self-organizing – the universe does not move and change in a chaotic state. Instead, the universe is driven to increasing order and complexity. For example, birds may not appear to follow any particular order when they flock. However, birds flocking actually demonstrates the continual movement and reorganization of individual parts within a larger group, creating a fluid system that may be difficult to understand. Some argue that the order is predetermined, and thus, changing a system requires one to challenge the system's underlying assumptions and create alternatives to direct the change.

Stakeholder – parties that exist within the system. They are invested in the outcomes of events that affect the system because such events will affect them as well.

Systems thinking – the ability to identify components of a system and understand how those variables interact and influence each other and the system as a whole (Gharajedahgi, 2013). Systems thinking is a discipline for seeing wholes; it is a framework for seeing interrelationships rather than things, for seeing patterns of change rather than static snapshots (Senge, 1990).

Tension – the strain that occurs in the connection between elements that exist within a system. This strain may be due to changes to one of the elements, both elements, or an external element. Exacerbating this strain may produce negative results to the elements involved and to other parts of the system.

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SARE – Peacekeepers Turned Perpetrators

PLEASE WATCH THE VICE NEWS INTERNATIONAL VIDEO PEACEKEEPERS TURNED PERPETRATORS https://www.youtube.com/watch?v=RZfoCHEIfDQ

Video Length: 23:09 minutes Published: July 27, 2018

This VICE News video investigates pervasive allegations of sexual abuse by United Nations (UN) peacekeepers in the Central African Republic (CAR). Women provide first-hand accounts of being sexually assaulted, and even impregnated, by UN peacekeepers. Whistleblowers may experience retaliation for bringing sexual assault cases to the attention of higher-ups. The number of convictions and sanctions against perpetrators is small when compared to the number of sexual abuse allegations. This ratio belies the UN's vigorous statements about how it does not tolerate sexual abuse and that whistleblowers are protected from punitive actions as a result of speaking up. As the UN's largest financial donor, the U.S. has to consider whether it should take actions to address the allegations of sexual abuse by UN peacekeepers.

- 1. Identify and draw a diagram of stakeholders (i.e., groups of people who are involved in and/or affected by the situation) in the UN sexual abuse issue and their connections to one another.
- 2. Thinking in time is a great way to understand the system's pattern of change. Consider the historical factors leading to the current UN sexual abuse issue. How did the stakeholders, their interrelationships, and system dynamics change over time?
- 3. Complex systems can behave in counterintuitive ways and actions can sometimes have unintended consequences. As you watch the video, identify examples of intended and unintended second- and third-order effects occurring in the UN sexual abuse issue.
- 4. Complex systems generally do not have one problem to solve, but a multitude of interrelated problems. Using your system representation, identify the system of problems that needs to be addressed to tackle the issues associated with the UN sexual abuse issue.
- 5. Imagine that you are tasked with developing an intervention to address the issues associated with the UN sexual abuse issue. Discuss with your team potential ways to intervene and choose the intervention that, in your team's opinion, has the most potential to succeed. Be prepared to defend your intervention. Note: We recommend that you use the diagram of today's UN sexual abuse issue to identify leverage points and design potential interventions.

SARE - Children for Sale

PLEASE WATCH THE VICE NEWS INTERNATIONAL VIDEO CHILDREN FOR SALE

https://www.youtube.com/watch?v=BMnOrRf0Wug

Video Length: 20:40 minutes Published: June 30, 2017

This VICE News video explores the factors that account for why a significant number of Bulgarian women put up their newborns for adoption in Greece. The women in question may hail from destitute villages and view selling their babies as a way to rise out of poverty. There are multiple opportunities for human trafficking rings to further exploit these women: paying the women a very small percentage of the final sale price, refusing to pay the women altogether, and purposely impregnating women. The situation is further compounded by Greece's lenient adoption laws, well-organized criminal networks, and buyers who are willing to pay to adopt children for various reasons.

- 1. Identify and draw a diagram of stakeholders (i.e., groups of people who are involved in and/or affected by the situation) in the illegal adoption trade and their connections to one another.
- 2. Thinking in time is a great way to understand the system's pattern of change. Consider the historical factors leading to the current illegal adoption trade. How did the stakeholders, their interrelationships, and system dynamics change over time?
- 3. Complex systems can behave in counterintuitive ways and actions can sometimes have unintended consequences. As you watch the video, identify examples of intended and unintended second- and third-order effects occurring in the illegal adoption trade.
- 4. Complex systems generally do not have one problem to solve, but a multitude of interrelated problems. Using your system representation, identify the system of problems that needs to be addressed to tackle the issues associated with the illegal adoption trade.
- 5. Imagine that you are tasked with developing an intervention to address the issues associated with the illegal adoption trade. Discuss with your team potential ways to intervene and choose the intervention that, in your team's opinion, has the most potential to succeed. Be prepared to defend your intervention. Note: We recommend that you use the diagram of today's illegal adoption trade to identify leverage points and design potential interventions.

SARE - Cash for Kim

PLEASE WATCH THE VICE NEWS VIDEO SPECIAL CASH FOR KIM

https://www.youtube.com/watch?v=SPjKs8NuY4s

Video Length: 32:41 minutes Published: May 31, 2016

This VICE News episode investigates how tens of thousands of North Koreans have been sent by North Korean leader and dictator, Kim Jung-Un, to work abroad in countries including Poland, Malta, Russia, Qatar, and more. These workers are subjected to aversive, forced labor conditions such as working long hours with no overtime pay, no vacations or holidays, small wages, unsafe working conditions, and heavy supervision. The majority of their wages are sent back to North Korea, where the wages end up going not to the workers themselves, but directly to the regime and Kim Jung-Un. This VICE News special episode explores the perspectives of many stakeholders involved and the conditions that allow this forced labor market to persist.

- 1. Identify and draw a diagram of stakeholders (i.e., groups of people who are involved in and/or affected by the situation) in the North Korean forced labor market. Discuss these stakeholder relationships and their connections to one another.
- 2. Thinking in time is a great way to understand the system's pattern of change. Consider the historical factors leading to the current North Korean forced labor market. How did the stakeholders, their interrelationships, and system dynamics change over time?
- 3. Complex systems can behave in counterintuitive ways and actions can sometimes have unintended consequences. As you watch the video, identify examples of intended and unintended second- and third-order effects occurring in the North Korean forced labor market.
- 4. Complex systems generally do not have one problem to solve, but a multitude of interrelated problems. Using your system representation, identify the system of problems that needs to be addressed to tackle the North Korean forced labor market.
- 5. Imagine that you are tasked with developing an intervention to address the issues associated with the North Korean forced labor market. Discuss with your team potential ways to intervene and choose the intervention that, in your team's opinion, has the most potential to succeed. Be prepared to defend your intervention. Note: We recommend that you use the diagram of today's North Korean forced labor market to identify leverage points and design potential interventions.

SARE – Synthetic Drugs

PLEASE WATCH THE HBO VICE NEWS VIDEO SYNTHETIC DRUGS (SEASON 3, EPISODE 5)

https://www.youtube.com/watch?v=CGjOiUoSGt8

Video Length: 14:45 minutes Published: January 20, 2016

There are two stories covered in this VICE News episode. Synthetic Drugs is the first story.

Synthetic Drugs describes the factors surrounding the rise of recreational synthetic drug use in the U.S. The story also explores the various aspects surrounding supply and demand of these types of drugs. The correspondent visits a production lab in New Zealand, where they create chemical compounds of new drugs in an effort to put safer alternatives on the market. This video describes how different stakeholders are taking certain actions to skirt government regulations and make money off of high overseas (U.S.) demand for synthetic drugs.

- 1. Identify and draw a diagram of stakeholders (i.e., groups of people who are involved in and/or affected by the situation) in the synthetic drug industry and their connections to one another.
- 2. Thinking in time is a great way to understand the system's pattern of change. Consider the historical factors leading to the current synthetic drug situation in the U.S. How did the stakeholders, their interrelationships, and system dynamics change over time?
- 3. Complex systems can behave in counterintuitive ways and actions can sometimes have unintended consequences. As you watch the video, identify examples of intended and unintended second- and third-order effects occurring in the synthetic drug system.
- 4. Complex systems generally do not have one problem to solve, but a multitude of interrelated problems. Using your system representation, identify the system of problems that needs to be addressed to tackle the synthetic drug epidemic in the U.S.
- 5. Imagine that you are tasked with developing an intervention to address the synthetic drug epidemic in the U.S. Discuss with your team potential ways to intervene and choose the intervention that, in your team's opinion, has the most potential to succeed. Be prepared to defend your intervention. Note: We recommend that you use the diagram of today's synthetic drug industry to identify leverage points and design potential interventions.

SARE – Schoolgirls for Sale in Japan

PLEASE WATCH THE VICE NEWS EXCLUSIVE VIDEO SCHOOLGIRLS FOR SALE IN JAPAN https://www.youtube.com/watch?v=0NcIGBKXMOE

Video Length: 17:47 minutes Published: July 20, 2015

This VICE News episode explores issues associated with the "Joshi Kosei" (high school girl) business in Japan. Host Simon Ostrovsky explores different settings in which teenage girls work to satisfy the schoolgirl fantasies of adult men. The video shows girls in school uniforms soliciting clients for "walking dates" in a busy Tokyo neighborhood, a café where clients can hire teenage schoolgirls to chat by the hour, and a schoolgirl-band concert where adult men get a chance to meet the band members afterward. The host explores the links between the schoolgirl culture and business, as well as prostitution and human trafficking in Japan.

- 1. Identify and draw a diagram of stakeholders (i.e., groups of people who are involved in and/or affected by the situation) in the "Joshi Kosei" business in Japan and their connections to one another.
- 2. Thinking in time is a great way to understand the system's pattern of change. Consider the historical factors leading to the current "Joshi Kosei" business in Japan. How did the stakeholders, their interrelationships, and system dynamics change over time?
- 3. Complex systems can behave in counterintuitive ways and actions can sometimes have unintended consequences. As you watch the video, identify examples of intended and unintended second- and third-order effects occurring in the "Joshi Kosei" business.
- 4. Complex systems generally do not have one problem to solve, but a multitude of interrelated problems. Using your system representation, identify the system of problems that needs to be addressed to tackle the issues associated with the "Joshi Kosei" business in Japan.
- 5. Imagine that you are tasked with developing an intervention to address the issues associated with the "Joshi Kosei" business in Japan. Discuss with your team potential ways to intervene and choose the intervention that, in your team's opinion, has the most potential to succeed. Be prepared to defend your intervention. Note: We recommend that you use the diagram of today's "Joshi Kosei" business to identify leverage points and design potential interventions.

SARE – Afghan Money Pit

PLEASE WATCH THE HBO VICE NEWS VIDEO AFGHAN MONEY PIT (SEASON 2, EPISODE 1)

https://www.youtube.com/watch?v=_CvWJVtEkUE&t=1157s

Video Length: 17:40 minutes Published: January 7, 2015

There are two stories covered in this VICE News episode. Afghan Money Pit is the first story.

Afghan Money Pit explores issues associated with relief and reconstruction efforts in Afghanistan. From 2002 to 2015, the U.S. spent over \$100 billion towards relief and reconstruction efforts in Afghanistan. Investigations by Special Inspector General for Afghanistan Reconstruction, John Sopko, have shown that a significant number of the funded projects turn out to be wasteful, useless, or lost to corruption and abuse. In this episode, Shane Smith sits down to talk with Mr. Sopko and explores some of the failed reconstruction efforts in Afghanistan.

- Identify and draw a diagram of stakeholders (i.e., groups of people who are involved in and/or affected by the situation) in the Afghanistan reconstruction efforts and their connections to one another.
- 2. Thinking in time is a great way to understand the system's pattern of change. Consider the historical factors leading to the current Afghanistan reconstruction efforts. How did the stakeholders, their interrelationships, and system dynamics change over time?
- 3. Complex systems can behave in counterintuitive ways and actions can sometimes have unintended consequences. As you watch the video, identify examples of intended and unintended second- and third-order effects occurring in the Afghanistan reconstruction efforts.
- 4. Complex systems generally do not have one problem to solve, but a multitude of interrelated problems. Using your system representation, identify the system of problems that needs to be addressed to tackle Afghanistan reconstruction efforts.
- 5. Imagine that you are tasked with developing an intervention to address the issues associated with the Afghanistan reconstruction efforts. Discuss with your team potential ways to intervene and choose the intervention that, in your team's opinion, has the most potential to succeed. Be prepared to defend your intervention. Note: We recommend that you use the diagram of today's Afghanistan reconstruction efforts to identify leverage points and design potential interventions.

SARE – The Mafia Is Trashing Italy

PLEASE WATCH THE VICE NEWS TOXIC VIDEO THE MAFIA IS TRASHING ITALY

https://www.youtube.com/watch?v=vBHNmw0A80M (Part 1) https://www.youtube.com/watch?v=N8UAihE06AU (Part 2)

Total Video Length: 53:35 minutes Published: February 6, 2013

This VICE News episode explores issues associated with the ties between criminal organizations and waste management in Italy. The Mafia is one of Italy's oldest, largest, and most pervasive clan-based criminal organizations. It exercises a significant amount of control in the country, exerting its power through both legal and illegal means. In Naples, the Mafia's strong ties to the waste management system have resulted in a unique crisis that has lasted over a decade. This case explores the impact of the waste management crisis on the Italian people and the Mafia's entanglement with the political system.

- 1. Identify and draw a diagram of stakeholders (i.e., groups of people who are involved in and/or affected by the situation) in the Mafia waste management system in Italy and their connections to one another.
- 2. Thinking in time is a great way to understand the system's pattern of change. Consider the historical factors leading to the current Mafia waste management system in Italy. How did the stakeholders, their interrelationships, and system dynamics change over time?
- 3. Complex systems can behave in counterintuitive ways and actions can sometimes have unintended consequences. As you watch the video, identify examples of intended and unintended second- and third-order effects occurring in the Mafia waste management system.
- 4. Complex systems generally do not have one problem to solve, but a multitude of interrelated problems. Using your system representation, identify the system of problems that needs to be addressed to tackle issues associated with the Mafia waste management system in Italy.
- 5. Imagine that you are tasked with developing an intervention to address issues associated with the Mafia waste management system in Italy. Discuss with your team potential ways to intervene and choose the intervention that, in your team's opinion, has the most potential to succeed. Be prepared to defend your intervention. Note: We recommend that you use the diagram of today's Mafia waste management system in Italy to identify leverage points and design potential interventions.

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Sociocultural systems thinking (SCST) is instrumental to Army leaders fulfilling the Army's mission in different parts of the world. SCST involves navigating the operational environment's culture and interactions with its individuals in order to understand how various elements are interrelated to form a coherent whole. Furthermore, SCST is a capability that is honed through training. As part of a larger research effort to improve Army leaders' SCST, the U.S. Army Research Institute (ARI) developed the Systems Analyses of Real Events (SARE) Practical Exercise. SARE is discussion-based and designed to be implemented by a facilitator in groups of varying sizes. SARE uses real world events, both operational and non-operational, to cover various sociocultural systems (SCS) concepts, such as co-adaptive cycles, historical factors, multiple players/perspectives, and second- and third-order effects.

15. SUBJECT TERMS

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