The 33: Analysis of the 2010 Chilean Mining Crisis

The Great Eight

Gabriel Brown
Emma Fretts
Melissa Martinez
Nikkole Mello
Sara Nikles
Sofia Pernia
Jake Rosenberg
Mitchell Sumser
The San Esteban Mining Company

Every year, thousands of men die in mining accidents. These incidents are a testament to the truly dangerous conditions these miners must endure in their day-to-day lives. At almost 100 years old, the San Jose Mine produces copper, gold and other minerals. The mine is located in Copiapo, Chile. On August 5, 2010, 33 of the miners employed by the San Esteban Mining Company faced a tragic mine collapse as a result of the industry’s neglect in regards to safety concerns. While mining in Chile is generally dangerous, this mine in particular has a history of mining accidents that have killed and injured workers (Azul, 2010). In the six years leading up the 2010 accident, two miners lost their lives as a result of two separate cave-ins. In 2007, a geologist died in an explosion (Komnenic, 2013). And falling rocks severely injured miner Gino Cortez. As a result of the injury, Cortez’s leg was amputated. No elementary safety measures were undertaken even after these accidents. Despite the mining company’s previous issues, the 33 miners in the 2010 crisis were successfully rescued after being trapped 2,297 feet underground for 69 days. Tracy Corrigan, Assistant Editor of The Telegraph calls the rescue “a rare phenomenon: a corporate disaster with a happy ending” (2010).

The Costs and Benefits of Exemplification

Through analyzing the crisis at the San Jose Mine, it is clear that the collapse exemplifies a lack of safety precautions in the Chilean mining industry. As noted in “Effective Crisis Communication: Moving from Crisis to Opportunity,” written by Ulmer, Sellnow and Seeger,
the crisis theory of exemplification refers to a shocking, vivid and emotionally stimulating incident that profoundly influences the perception of an organization. An exemplification crisis can create an attraction but often, and more commonly, create an aversion. The 2010 Chilean mine collapse created both. Aside from the initial internal and external stakeholders that were affected by the mine collapse, a global reach of media coverage cultivated an entirely new group of stakeholders. The world’s eyes and hearts were focused on their televisions in hope of a successful rescue. Widespread infatuation of the rescue plan shaped the San Esteban Mining Company into an exemplar of crisis communication in the mining industry. Because of the rapid spread of information about the incident, the San Esteban Mining Company had the opportunity to utilize its large audience to showcase its crisis plan and communication skills. Unfortunately, the organization failed to have an initial plan and embrace the accident in a beneficial way; the importance of taking immediate action was not emphasized. Kirsten Sehnbruch, a professor at the University of Chile's Institute of Public Affairs, said the accident was, “the result of negligence on the part of both the mining company and the government,” and “in any developed country, the owners of the mine would be in jail” (Estrada, 2010).

Summary of Analysis

In this analysis, it is important to note that the government and the San Esteban Mining Company worked together in the rescue efforts and both were equally responsible for the strengths and weaknesses of this crisis. Although this crisis is an example of exemplification, which in this case was both positive and negative, there are clear strengths and weakness that can
be seen. This analysis will go into detail about the weaknesses, including avoidance and apathy towards the crisis and the concept of a predictable surprise. A majority of the company’s concerns with the crisis related to upholding a strong image in the media rather than showing genuine care throughout its communication. As for the strengths, the concept of humanism played a crucial part in this crisis. With persistence from the community and an influx of global support, the men were rescued by a group of over 130 people. Billions of people also watched and cheered on the rescue from around the world. Other key strengths included the brotherhood among the miners, and their teamwork during the 69 long days underground.

Weaknesses

The first weakness within this case is seen when the owners of the mine, Alejandro Bohn and Marcelo Kemeny, displayed signs of apathy in their avoidance of the incident and inability to properly respond to it. “The mine’s owners were unable to respond and subsequently filed for bankruptcy” (Yaxley, 2010). This avoidance caused President Sebastian Rivera and the Chilean government to engage in a plan of action. Rivera and the rest of the government’s meager attitudes, in terms of willingness to attempt a rescue, were a huge weakness for the mining company. Once the media coverage increased, the government felt obligated to begin creating a plan on its own; one may not have been implemented otherwise. “Considerable pushing by the miners’ relatives was required before the rescue was swung into action” (Corrigan, 2010). A regional police chief of Copiapo noted that the miner’s families’ persistence and confrontation of the police was a critical moment. This disaster also highlighted the poor safety standards of the
industry. Because this crisis demonstrated the Exemplification Theory, the mining company’s weaknesses, including their lack of safety precautions and ignorance of clear signs that indicated an impending collapse, were displayed clearly for the world to see. “Chile does not have coherent, efficient, public policies or a national structure in the area of work safety and health” (Estrada, 2010). This disregard of warnings led to a predictable surprise, a theory noted in “Effective Crisis Communication: Moving from Crisis to Opportunity.” Instead of making changes after previous crises, the San Esteban Mining Company kept the same policies, making no improvements to the mine over many years. The concept of a predictable surprise is simply the failure to learn from past failures, and that’s exactly what San Esteban did. “This case shows a very good example of a mine earning a lot of money, yet they didn’t have stairs for an emergency” (Epatko, 2010).

Strengths

Notwithstanding the large amount of weaknesses displayed in this crisis, much strength was shown, as well. “The San Esteban mining company’s obvious uselessness at least made it easier for everyone else to pull together” (Corrigan, 2010). Humanism played an enormous role in this case. Humanism is a value system that emphasizes the uniqueness and inherent worth of every human being. Humans across the globe have an instinct to provide for anyone in need and go to extreme measures to rescue individuals in a crisis (Ulmer et al., 2015, p. 220). The efforts by the miners for survival, their families’ persistence in demanding a rescue effort and the government’s delivery of a rescue plan are just a few examples of humanism in this incident.
“The rescue operation was an extraordinary effort, entailing leadership under enormous time pressure and involving teamwork by hundreds of people from different organizations, areas of expertise, and countries” (Rashid, Edmonson, Leonard, 2013). One-third of the costs of the rescue were even covered by private donations. A man named Laurence Golborne became the Minister of Mining during this crisis. “With plenty of business experience but no background in mining and just four months in office, he took charge of one of the most widely watched disaster recovery efforts in world history” (Jordan, Koljatic, Useem, 2011). Not only did Golborne obtain his credibility in a short amount of time, he also set up Camp Hope, a place for the relatives to stay immediately outside of the mine premises. Ultimately, he was key player in assuring a successful rescue and at the same time gave the miners’ families strength through it all. Another clear strength is the miners’ brotherhood and teamwork while they were trapped. Without the miners’ efforts to work together, all 33 men may not have survived. “The supervisor immediately put them on three days of rations in the refuge after they were trapped and stretched it and stretched it and stretched it” (Wade, 2011). Mario Sepulveda, the proclaimed “supervisor,” would line up 33 “meals” once a day. “Enjoy your meal,” he said, “this is delicious stuff, make it last” (Getlen, 2014). The men held daily prayer meetings and played games like checkers using a board made from cardboard, and dominoes. They even attempted to use humor to keep a lighthearted mood, joking that they would eat the rookie miner from Bolivia if they weren’t rescued by the time the food supply was depleted. In terms of exemplification, some say that the “positive light on Chile is invaluable.” Beatrice Manz, a professor of Latino studies at the University of California at Berkeley says, “If you have the spotlight on you, this is not a bad way to do it” (Epatko, 2011). Although initially the San Esteban Mining Company failed to have a
plan and embrace the accident in a beneficial way, everyone came together and turned this
disaster into a successful rescue that should lead to more investment in Chile’s working
conditions.

Recommendations

Although the San Esteban Mining Company overcame its initial inability to effectively communicate, the company could have been more proactive about devising a rescue plan. Because an exemplification crisis is shocking, vivid and emotionally stimulating, it commonly creates an aversion. In retrospect, there were clear preventative measures that could have been taken, but were not, to better handle the crisis. Instead of using exemplification to its benefit, the company’s miscommunication, uncertainty and blame became a detriment. The owners of the mining company failed to give frequent statements to the media, which was a lost opportunity for clarity and clear communication. We recommend consistent communication with the media, and the miner’s families, through press releases and public statements to provide transparency, thus fully utilizing the global coverage to the San Esteban Mining Company’s advantage.

Humanism is a value system that emphasizes the uniqueness and inherent worth of every human being (Ulmer et al., p. 220). The mining company made the quick assumption that the miners would not survive given the time necessary for the rescue. In the face of any crisis a company should value its employees’ needs above anything else. In this scenario, the mining company chose to put the status of its reputation before the safety of the miners. Our
recommendation is to not make assumptions without strong evidence of the miners’ state of health and put themselves in the perspective of the miner’s families. Lastly, we know that predictable surprise is the notion of failing to learn from failure (Ulmer et al., p. 186). The mining company was not prepared to handle a mine collapse. The company did not pay enough attention to the faults of the mine before allowing the miners to begin work. In a case like this, it is important for the mining company to not overlook potential problems in an already dangerous profession. Our recommendation is that the company creates a standard of safety measures that are part of a daily audit. If the company had understood and taken into account the severity of the previous mine issues they could have pieced together the conclusion that the mine was not in a suitable working condition. Our recommendation in regard to predictable surprise is that the mining company should have considered its past failures and all evidence that the mine was unsafe and acted accordingly.

Conclusion

Although the San Esteban Mining Company was not the first of its kind, it soon became the most influential among the industry by demonstrating the driving power of global media and humanism. Their initial apathy towards the crisis demonstrated a lack of willingness to plan a rescue; however, the mining company must be credited for its final ability to recognize the importance of the rescue and implementation of the plan. The combination of outside efforts along with teamwork and brotherhood displayed by the miners allowed for a successful mission and set precedent for future incidents to come.
References


The miracle, when it came on day 17, when the rescuers heard the probe being hit and so knew someone was alive, was that all 33 were alive and uninjured. You cannot find Lilly on camera during the scenes of jubilation that followed their discovery. As the beaming president read out the note that was attached by the miners to the drillhead ("We are fine in the refuge – the 33"), Lilly is nowhere to be seen. "I remember I stood up to scream out of euphoria... and I fainted. I was out for eight minutes... Then I didn't go out to celebrate, I went to the statue of the Virgin, I started to cry, telling her I knew she would not fail me."

Recalls Elvira "Katty" Valdivia, wife of one of the trapped men, Mario Sepúlveda: "We realised more and more journalists were turning up... so if we were unhappy we almost ate the minister and went out and held a press conference. The press realised we were doing their work for them – holding the government to task."

Infographic about How the miners were saved. - Emma
http://www.telegraph.co.uk/news/worldnews/southamerica/chile/7961923/Chilean-miners-trapped-in-San-Jose-mine.html

Good article about the Costs and benefits of the rescue mission
http://www.pbs.org/newshour/rundown/cost-of-mine-rescue/

Article about lessons to be learned

Overview of the rescue

Harvard Business Review walk through of the handling of the crisis with examples

Commentary on the effects of the crisis
http://www.telegraph.co.uk/finance/comment/tracycorrigan/8064902/Chile-aced-mining-rescue-but-how-well-will-it-deal-with-the-aftermath.html

PR Conversation about the crisis

Only Journalist who had access to the Miners during the event talking about how unsafe the mine was

Extra article from UPENN about crisis

http://www.shortlist.com/shortlists/chilean-miners-10-facts

Article about safety a year later
Backlash on workplace safety in chile
http://www.alborada.net/estrada-chile-mining-131010

Videos:
https://www.youtube.com/watch?v=hOoIBOYqHyw

Some info about the owner of the mine (article in spanish, so this is the translation below)
s-para-vender-yacimiento.shtml

Alejandro Bohn is now the manager and sole employee of his company. It was a very different reality until August 5, 2010, when 33 miners were trapped inside a gold and copper property, named San Jose and located in Region III.

Today, the entrepreneur spends much of his day working on the liquidation of the assets of the mine and ordering the latest scientific and geological reports, by the end of the year, they will allow him to have a prospective transaction. To date, Bohn has met with about 10 stakeholders, with the aim of exploring the option. While most of these are international companies, all are aware in detail of the accident where 33 men were trapped 70 days to 720 meters deep.

So far, they have sold US $ 5 million of the assets of the firm, of which $ 4 million was earmarked to pay settlements for workers. Now, Bohn works in the last process, which will sell the 1,500 hectares that make up the entire site, which the San Jose mine accounted for about 15%.

The owners aim to obtain a roughly US $ 29 million gain, which will close all debts. One of these is the US $ 5 million that the owners agreed with the State, for concepts of costs associated with the rescue of the "33".

Rescue Plans:
Mining Minister Laurence Golborne described for CNN the rescue efforts, the three holes - dubbed Plan A, Plan B, and Plan C - being dug in an effort to open a passageway to safety for the men. Plan A and Plan B each require two holes to be drilled - a small hole first and then a wider one about 26 to 28 inches (65-70 centimeters) in diameter. Golborne said the second pass would be slower progress than the first pass.

Plan A involves using a drill placed directly above the shelter where the miners are holed up. Under Plan B, a hole is being drilled at a roughly 80-degree angle into an area of the mine shaft that is used as a mechanical workshop. That distance, engineers estimate, is around 2,034 feet (620 meters). The drill used in Plan C would need to cut through some 1,969 feet (600 meters) of rock and earth.

Plan A drill is a Raise Borer Strata 950, usually used for drilling ventilation shafts in mines.
Plan B drill is a Schramm T-130, usually used for boring water holes.
Plan C drill is a Rig 421 drill, usually used for drilling for oil.

On Aug. 5, 2010 a Gold and Copper mine north of Copiapo, Chile called “San Jose” caved in trapping 33 miners.

On Oct. 13, 2010 all 33 men reached the surface after more than 2 months (69 days); 2,300 feet below the surface.

For 17 days there was NO word on the condition or fate of the men.

Chileans grew increasingly skeptical that any of the miners had survived
A small bore hole reached the miners and were able to communicate that they all had survived.

The discovery sparked celebrations nationwide as rescue efforts energized the country.

The miners later used a modified telephone to sing Chile’s national anthem to the hundreds of scared relatives celebrating above.

News reports suggested that ventilation shafts had survived the mine’s collapse, allowing enough fresh air to reach the chamber where the miners were trapped.

The miners acted quickly and used mining machinery for light, a source of charging batteries for head lamps, and drank water from storage tanks to survive.

Luckily, none of the miners were threatened by toxic gases such as methane, which can poison miners after cave-ins.

Resources ran low which lead to rationing. The tiny bore holes kept bodies and spirits alive. The Bore hole sent down tubes filled with sugars, water, and liquid nutrients to sustain the miners. In doing so they trying to build another tunnel to free the miners without creating another collapse.

On Oct. 9, 2010 the rescue tunnel reached the miners and one-by-one in a capsule the men were freed. Luis Urzúa, the shift leader who organized the miners’ lives while they were underground, was the last to come up.

The mine, known as San José, has a history of accidents and was forced to shut down shortly to make safety improvements, but its owners did not follow through according to lawmakers and risk prevention specialists.

The huge rescue operation gained worldwide attention making for a media frenzy of more than 1,400 journalists awaiting the rescue.


A Chilean legislative commission is investigating reports that mining operators ignored danger warnings from a man who was later among 33 later trapped when a mine collapsed.

Special Section: Chile Mine Collapse

Deputy Carlos Vilches, a commission member, said Tuesday that miner Juan Illanes has alleged that operators refused his request to leave the mine three hours before it collapsed on Aug. 5. Illanes reportedly had heard loud sounds that indicated a collapse could be brewing.
Vilches represents Copiapó, the community closest to the San Jose Mine where the collapse occurred. He said he would call Illanes and other miners to testify before the commission about conditions at the mine.

Another worker, Gino Cortez, lost his leg in a smaller collapse inside the San Jose Mine in July.

The mining company's owners and supervisors of the mining operation are under investigation in connection with the earlier accident.

A spokesperson for the San Esteban mining company that owns the mine said the firm would have no comment pending possible legal proceedings.

**New life:**
Bohn indicates that the last five years have not been easy for him. He went from winning prizes at the National Mining Society (Sonami) and form the reservoir San Esteban (a medium sized company, with Marcelo Kemeny), to be questioned for alleged breaches of business ethics. People close to him turned their backs on him in the days and months following the accident.

In parallel, the Office of Atacama initiated a criminal investigation against him. For this reason, he had to declare more than 12 hours with the study advocates Insunza Lawyers. In 2013, prosecutors adjourned the inquest after determining that there was no history that allowed file an indictment and could not establish the existence of a crime.

The last belongings of mining, meanwhile, are in the hands of a committee of creditors, created after the closure of the mine. This is because the owners bet to recover the money and pay workers and creditors, rather than declare bankruptcy.

It was this body which appointed Bohn in charge of liquidating the assets. Kemeny, meanwhile, remains tied to the firm that owns part of the property but is remote administration tasks.

In recent years Bohn began a new legal battle: a charge of libel against Vicenot Tobar, former superintendent of security San Jose mine, and former regional head of Anton Sernageomina Hraste who made statements that slid responsibility entrepreneurs in the mining accident. Both had to backtrack and noted in court that his words had no livelihood.

In the coming days Alejandro Bohn could go to see the film of "33". If so, they say some close, go with their lawyers to see if it appears in the film and the way they have.

**More info about the owners of the mine**
- http://www.cooperativa.cl/noticias/pais/region-de-atacama/mineros-atrapados-san-jose/alejandro-bohn-y-marcelo-kemeny-el-perfil-de-los-duenos-de-la-mina-san-jose/2010-10-14/001858.html
- Engineers shared school and they are brothers in law.
- Their company amounted to more than 40 business fines before the accident.
- Alejandro Bohn and Marcelo Kemeny, owners of the San Esteban mining company which owns the site San Jose-known for years, as they are not only partners are also brothers in law.
- Both studied at the Nido de Aguilas and share the Jewish religion, so they tend not to work on Friday afternoon.
- When the 33 de Atacama were trapped on 5 August, the firm already had three accidents with fatal consequences, and one overriding, which cost Gino Cofré a leg.

**Timeline:**
August 5, 2010 - A collapse of the main ramp into the San Jose mine leaves 33 miners trapped 2,300 feet underground. Emergency officials are unable to communicate with the trapped miners.

August 6, 2010 - A statement from Chile's National Emergency Office says 130 people are working to rescue the miners.

August 7, 2010 - Rescuers face a setback when another cave-in blocks the path they were using to reach the miners. Chilean President Sebastian Pinera travels to Copiapo, where the mine is located, to meet with officials.

August 22, 2010 - The miners send a note up tied to a probe which was lowered by authorities earlier in the day. Written in red ink, it reads, "We are fine in the shelter, the 33 of us."

August 23, 2010 - A second probe reaches the miners. Rescuers are now capable of relaying communications and can send food and water to miners. Before this, the miners survive by sharing small amounts of tuna and mackerel that were in the shelter, along with water.

August 24, 2010 - Experts from NASA and Chilean navy submarine experts are called to help address the psychological toll the isolation can take on the miners.

August 26, 2010 - Miners send a video message to their families expressing thanks for the efforts under way to free them.

August 27, 2010 - Miners are told for the first time of the lengthy process rescuers expect it will take to extract them from the mine. Officials announce that they are working on a "Plan B", which could help speed up the rescue process.

August 29, 2010 - Each of the trapped miners is given about 20 seconds to speak directly with family members for the first time since the accident.

August 31, 2010 - Plan A drilling starts.

September 3, 2010 - The Schramm T-130 drill, otherwise known as Plan B, arrives at the rescue scene. The drill is usually used for boring water holes.

September 6, 2010 - Rescue officials temporarily stop the Plan B initial drill due to a damaged drill bit.

September 9, 2010 - Miners record a new video to show their families a glimpse of what their routines are like. The three-minute clip shows them in good spirits.

September 14, 2010 - Elizabeth Segovia, wife of trapped miner Ariel Ticona, gives birth to a girl she names Esperanza, Spanish for hope.

September 17, 2010 - The Plan B bore hole reaches the 33 miners. However, the hole is only 12 inches wide and will need to be widened on a second pass.

September 22, 2010 - The Plan C drill starts drilling.

September 25, 2010 - The rescue capsule expected to haul the miners back to the surface arrives at the mine. Named the Phoenix, it's painted red, white and blue - the colors of the Chilean flag.

September 28, 2010 - The Plan B drill passes the halfway point to the trapped miners.

September 30, 2010 - Rescue crews successfully test the capsule. One test subject declares it "comfortable."
**October 1, 2010** - Mining Minister Laurence Golborne announces that officials expect to reach the miners as early as mid October - sooner than previously expected. Crews could reach the miners between October 15 and October 30. Officials earlier predict the date might be as far away as November or Christmas.

**October 5, 2010** - Rescuers say they are within 160 meters of the trapped miners.

**October 6, 2010** - Two additional capsules and a winch, a device used for winding and tension adjustments, arrive at the mine site.

**October 7, 2010** - A source close to rescue operations says the Plan B drill is now less than 100 meters from the target.

**October 9, 2010** - The Plan B drill breaks through the roof of the mine.

**October 12, 2010** - During a press conference, Mining Minister Golborne announces that the rescue is expected to begin during "the last quarter" of the day.

**October 13, 2010** - The first miner rescued, Florencio Antonio Avalos Silva, 31, reaches the surface at about 12:11 a.m. ET. Shift foreman Luis Alberto Urzua Iribarren, 54, is the 33rd and final miner to be rescued, approximately 22 1/2 hours after the rescue operation begins.

**July 25, 2011** - Representatives for the rescued miners announce that the official and authorized film rights to their story have been sold to producer Mike Medavoy.

**August 30, 2011** - Fourteen of the miners are awarded lifetime monthly pensions of 250,000 Chilean pesos (approximately $540), by Cecilia Morel, Chile's first lady. The government chose which miners would receive the lifetime pensions based on health, age and the opinion of the group of survivors.

**August 1, 2013** - Chilean prosecutors announce they have closed the investigation into the mining disaster without filing any charges.

**August 4, 2013** - San Esteban Mining Company agrees to sell the now-closed San Jose mine to pay the miners and reimburse the Chilean government for the cost of rescue efforts, in addition to paying the company's other debts.

Some info on the relationship between owners Alejandro Bohn and Marcelo Kemeny with stakeholders:

- [http://buscador.emol.com/emol/Alejandro+Bohn](http://buscador.emol.com/emol/Alejandro+Bohn)
- "We are very happy, because it was perfect and the rescuers did so well." Alejandro Bohn, one of the owners of Minera San Esteban -reacted in a telephone conversation with "El Mercurio", the successful rescue of 23 hours long then allowed to return unharmed to the surface 33 miners trapped by a mine collapse in Aug. 5. Neither Bohn nor his partner Marcelo Kemeny attended the San Jose mine, located 50 km from Copiapo to witness the rescue and greet the families of workers. Despite his distant relationship with government authorities, Bohn said he communicated with them. "I talked (by phone) with the Minister of Mining, Laurence Golborne, and congratulated him on the outcome of the rescue operation," he said.

- [http://www.lanacion.cl/gobierno‐critica‐declaraciones‐de‐dueno‐de‐mina‐san‐jose/noticias/2010‐08‐23/223828.html](http://www.lanacion.cl/gobierno‐critica‐declaraciones‐de‐dueno‐de‐mina‐san‐jose/noticias/2010‐08‐23/223828.html)
- [http://www.elmostrador.cl/noticias/pais/2011/09/02/ingeniero‐que‐denuncia‐fallas‐de‐seguridad‐en‐la‐mina‐san‐jos e‐se‐retracta‐ante‐la‐justicia/](http://www.elmostrador.cl/noticias/pais/2011/09/02/ingeniero‐que‐denuncia‐fallas‐de‐seguridad‐en‐la‐mina‐san‐jose‐se‐retracta‐ante‐la‐justicia/)
1. Intro: Hi we are “___” and we have the topic of “The 33 Chilean Miners”.
   A. The 33 Chilean Miners were sent to the San Jose mine in Copiapo, Chile. The miners worked for the San Esteban Mining Company, who “had a history of poor safety performance, the New York Times notes. In the six years leading up the 2010 accident, two miners lost their lives as a result of two separate cave-ins. In 2007 a geologist died in an explosion.” (http://www.mining.com/investigation-into-infamous-chilean-mine-collapse-closes-18342/)

B. more to come

1. Strengths
   A. Chile's National Emergency Office worked quickly to save the miners (timeline here: http://www.cnn.com/2013/07/13/world/americas/chilean-mine-rescue/). They provided miners with materials (food, drinks) to keep them alive while underground.

   B. Organizational Renewal Theory: San Esteban used broad leadership (maybe too broad) when in the crisis. They tried to keep the public optimistic about the possibility of rescuing the miners.

   C. Examples of Organizational Renewal:
      A. They called on Chile’s National Emergency Office to rescue the miners rather than doing it themselves. Most of the PR was done by families of the miners.
      B. “The open communications approach that was evident from initial reports of the collapse of the mine reflected the leadership style of the Chilean president, Sebastián Piñera.” (http://www.prconversations.com/2010/10/an-international-view-of-crisis-management-of-the-chile-mine-disaster/)
      C. The San José rescue operation was an extraordinary effort, entailing leadership under enormous time pressure and involving teamwork by hundreds of people from different organizations, areas of expertise, and countries. (https://hbr.org/2013/07/leadership-lessons-from-the-chilean-mine-rescue)
      D. During the San José rescue, Chile’s political leaders raised people's hopes and, at the same time, injected realism. His directive was clear: Bring home the miners, dead or alive, sparing no expense. Piñera thus articulated the gap between reality and hope, and made a pledge to close it. He then turned to Chile’s largest mining company, the state-owned National Copper Corporation of Chile (Codelco), for help. (https://hbr.org/2013/07/leadership-lessons-from-the-chilean-mine-rescue)
      E. Its senior executives recommended André Sougarret, known for his composure under pressure, to lead the rescue. A mining engineer with over 20 years of experience, Sougarret managed El Teniente, reputed to be the world’s largest underground mine. To help him at the San José site, he called on a handpicked team of 32 Codelco managers, including two mine superintendents, a communications expert, and a psychologist in human resources management (who took charge of the relational aspects of the operation). (https://hbr.org/2013/07/leadership-lessons-from-the-chilean-mine-rescue)
      F. He (Sougarret) and his team cut through the confusion to establish situational awareness (a high-level understanding of critical elements of a complex environment, employed by air traffic controllers, military leaders, and emergency personnel) (https://hbr.org/2013/07/leadership-lessons-from-the-chilean-mine-rescue)
      G. "After what happened at the San Jose mine, mine safety became a key objective for the government," Chile’s Mining Minister Hernan de Solminihac said on Wednesday. "We’ve more than doubled the number of inspectors, which will help us control mine safety.” (http://www.bbc.com/news/world-latin-america-15285485)

3. Weaknesses
A. There was warning of collapse and they were still sent underground. They (reportedly) shrugged the collapse off until the families put immense pressure on them.

B. Scanning Failure: There were multiple warnings that the miners never should have begun mining in the San Jose mine. It was not ready to be mined in, especially after having just been closed AND a few people had already died in the mine.

C. Examples:
   A. The man who signed off on the mine being ready for mining (who later retired—will find his name) should not have signed off on this. It was obviously not ready for mining again.
   B. Alejandro Bohn and Marcelo Kemmeny have so far failed to explain why the mine was reopened after an earlier accident on 11 July, when a rock fall severed the leg of one miner, Gino Cortés. (http://www.theguardian.com/world/2010/aug/31/chilean-mine-bosses-questioned-collapse)
      A. to be noted!!!!!!: Prosecutors dropped the probe citing lack of evidence and sparking fury among Chileans, the Associated Press reports. A three-year investigation had been scrutinizing project owners Alejandro Bohn and Marcelo Kemmeny and the country's mining ministry's regulatory unit.
         (http://www.mining.com/investigation-into-infamous-chilean-mine-collapse-closes-18342)
      B. Bohn and Kemmeny have been billed with 25% of rescue operation costs, which ran the government about $22 million. (http://www.mining.com/investigation-into-infamous-chilean-mine-collapse-closes-18342)
   C. San Esteban Mining – the company behind the project – had a history of poor safety performance, the New York Times notes. In the six years leading up the 2010 accident, two miners lost their lives as a result of two separate cave-ins. In 2007 a geologist died in an explosion. (http://www.mining.com/investigation-into-infamous-chilean-mine-collapse-closes-18342)
   D. The mine was known for “primitive working conditions and perfunctory safety practices,” including escape tunnels that were “useless in an emergency because they lack the ladders necessary for the miners to use them.” (http://nypost.com/2014/10/11/how-the-chilean-miners-men-survived-for-69-days-beneath-the-earths-surface/)
   E. Deputy Carlos Vilches, a commission member, said Tuesday that miner Juan Illanes has alleged that operators refused his request to leave the mine three hours before it collapsed on Aug. 5. Illanes reportedly had heard loud sounds that indicated a collapse could be brewing. (http://www.cbsnews.com/news/chile-lawmaker-mine-collapse-warning-ignored/)
   F. "It's simply incredible that even in the face of the miners' warnings, measures were not taken to prevent the accident, and to ensure that they were not in the mine when the collapse occurred," said Interior Minister Rodrigo Hinzpeter. (http://www.cbsnews.com/news/chile-lawmaker-mine-collapse-warning-ignored/)

4. Recommendations
   A. The book says:
      A. “Organizations should treat failure as an opportunity to recognize a potential crisis or prevent a similar crisis in the future. (p 189)
      B. “Organizations learn to recognize risk by accepting and acting on their failures.” (p 189)
   B. The San Esteban mining company SHOULD HAVE had their own crisis communicators rather than having no one. This made them look bad because the wives of the miners ended up doing the communicating - and what they had to say did not help the mining company at all.
A. -Recalls Elvira "Katty" Valdivia, wife of one of the trapped men, Mario Sepúlveda: "We realised more and more journalists were turning up... so if we were unhappy we almost ate the minister and went out and held a press conference. The press realised we were doing their work for them – holding the government to task." (http://www.theguardian.com/world/2011/jul/17/chilean-miners-one-year-on)

C. The owners of the San Esteban mining company (Alejandro Bohn and Marcelo Kemeny) never really took responsibility for what happened (that I've seen yet). They should have owned up to or at least acknowledge that they had some responsibility for what happened. (did they do this? I havent seen it anywhere yet)

A. “A spokesperson for the San Esteban mining company that owns the mine said the firm would have no comment pending possible legal proceedings.” (this is on the Google Doc so not sure where it came from)

D. If the owners were to step up and accept responsibility and promise not to ignore ANY future signs of complications, they might have had a chance at keeping the company together and keeping public trust. However, they didn’t. Not only that, but it seems that the miners were snubbed out of compensation that they SHOULD have gotten, so the owners should have gone to the business’s grave compensating the miners.

A. Most of the miners are still pursuing a civil law suit against the owners and the state in the hope of winning compensation, but they recognise it could take years. Alex Vega says he has lost "all faith" in the government for failing to honour its promises of help with their welfare and retraining. All 33 were promised a pension, he says, but in the end only the 14 oldest miners were given one. "They promised us dental treatment because we spent so long drinking water from the underground tanks that it rotted our teeth, but that came to nothing," he adds. The government says there is a limit to what it can do. A private association is in charge of the miners' mental health and compensation is a matter for the courts. (http://www.bbc.com/news/world-latin-america-25569678)

E. The refuge conditions needed to be assessed and updated. Not enough food and water or first aid material.

A. The emergency ladders were never finished preventing them for have another route to escape from. The company should have taken the time to make sure this was finished since there was only one way in and out of this mine

B. The design of the mine was not made like most mines were. Instead of having vertical shafts with elevators that connected by horizontal galleries, like the floors in a high-rise office building. In this format, if one gallery collapsed you at least had a chance to turn around and run to one of the three or four vertical shafts. The chilean mine was built more like a tall spiral, like an old-fashioned bedspring. The single gallery loops in and out of the valuable veins of ore, and meanwhile slopes gently downward at an incline that can be managed by either motorized vehicles or just miners walking. No vertical shafts (except for ventilation), no expensive elevators—and no way out if the single spiral gallery collapses anywhere along its length.


All the other accidents that occurred beforehand, like the people that had gotten injured or died due to the conditions of the mine should of been looked into and fixed so it wouldn't happen again.

Mitch: Here is the info from your email. - Sofia
On Aug. 5, 2010 a Gold and Copper mine north of Copiapó, Chile called “San Jose” caved in trapping 33 miners. On Oct. 13, 2010 all 33 men reached the surface after more than 2 months (69 days); 2,300 feet below the surface. For 17 days there was NO word on the condition or fate of the men.

Chileans grew increasingly skeptical that any of the miners had survived

A small bore hole reached the miners and were able to communicate that they all had survived.

The discovery sparked celebrations nationwide as rescue efforts energized the country.

The miners later used a modified telephone to sing Chile’s national anthem to the hundreds of scared relatives celebrating above.

News reports suggested that ventilation shafts had survived the mine’s collapse, allowing enough fresh air to reach the chamber where the miners were trapped.

The miners acted quickly and used mining machinery for light, a source of charging batteries for head lamps, and drank water from storage tanks to survive.

Luckily, none of the miners were threatened by toxic gases such as methane, which can poison miners after cave-ins.

Resources ran low which lead to rationing. The tiny bore holes kept bodies and spirits alive. The Bore hole sent down tubes filled with sugars, water, and liquid nutrients to sustain the miners. In doing so they trying to build another tunnel to free the miners without creating another collapse.

On Oct. 9, 2010 the rescue tunnel reached the miners and one-by-one in a capsule the men were freed. Luis Urzúa, the shift leader who organized the miners’ lives while they were underground, was the last to come up.

The mine, known as San José, has a history of accidents and was forced to shut down shortly to make safety improvements, but its owners did not follow through according to lawmakers and risk prevention specialists.

The huge rescue operation gained worldwide attention making for a media frenzy of more than 1,400 journalists awaiting the rescue.

Over the past 30 years, the mining industry, which accounts for 40 percent of Chile’s gross domestic product, has profited from the high price of copper, gold and other commodities while keeping costs low by neglecting safety and accelerating the exploitation of its mining workforce.

Before the mine collapse, the San Jose mine was a relatively small underground operation, which extracted gold and copper. Annual revenues at the mine exceeded US$20 million. As a result of the latest collapse, the San Sebastian Group, which operates San Jose, filed for bankruptcy in September. This move places a question mark over the company’s ability to
provide the compensation it has promised to the trapped miners, plus back wages owed to the other 300 workers at the mine.

the San Sebastian Group is demanding that the Chilean government first unfreeze US$10 million in assets as a condition for compensating the miners, effectively holding hostage the compensation owed the workers in its dispute with the government. News reports indicate that the miners and their families are suing the mine owners and the Chilean government for US$27 million over conditions in the mine. Brunilda Gonzalez, mayor of the town of Caldera, located near the mine, reported that the miners and their families are “furious” that the San Jose mine was reopened in May 2008 with no improvements in safety following the death of a mine geologist in 2007.

PREVIOUS INCIDENTS:

While mining in Chile is generally dangerous, this mine in particular has a history of mining accidents that have killed and injured workers. In 2004, the miners union petitioned for the closure of the mine over its dismal safety record. The petition was driven by the death of miner Pedro Gonzalez from a rock fall. The union’s demand was denied by a Chilean appeals court. In 2007, before the closure of the mine, workers at the mine once again petitioned for its closure, following the death of three miners. Once again, the petition was denied by the courts. Earlier this year, in July, falling rocks at San Jose severely injured a miner, Gino Cortez, whose leg had to be amputated. Cortez maintained that elementary safety measures, such as installing a safety wire mesh on the roof of the mine to prevent rocks from falling, were never undertaken. While the 33 miners were waiting to be rescued at San Jose, another worker was killed by falling rocks at a separate mine.

The San Jose mine incident exemplifies what has happened to mine safety in Chile since the dictatorship of Augusto Pinochet. Under Pinochet, in the name of regulation and free market capitalism, virtually all safety regulations were dismantled. A key player in that process was current president Sebastian Pinera’s older brother, Jose Pinera, minister of labor in 1980. Jose Pinera was tasked with creating a labor code that would not interfere with big business profits. In the name of a more flexible labor code that would stimulate economic growth, he abolished labor rights that had been won through decades of bitter struggle by the Chilean working class.

Since the turn of the century, some 350 miners have died from mine accidents in Chile, a number that may well be an underestimation. According to Dick Blin, a spokesman for the International Federation of Chemical, Energy, Mine and General Workers’ Unions (ICEM), worldwide some 12,000 miners die every year, well above official figures. The under-reporting of mine fatalities is most glaring at small mines, such as the one at San Jose.
RECOMMENDATIONS:

Recommendations: The 3 steps each theory suggests should be taken POST crisis.

# theories: exemplification, humanism, and predictable surprise

Exemplification recommendation: because the mining company was an exemplar (meaning that their crisis was widely covered and talked about the news) they could have taken that limelight and used it to their benefit to immediately address the situation honestly without letting the victims family members do it for them. they could have turned away any negative attention if they had taken the opportunity they were given.

Humanism (p220) recommendation: Humanism is a value system that emphasizes the uniqueness inherent worth of every human being. In the case of the mining crisis, the mining company was originally ready to give up hope and call it quits, leaving the miners to die. Fortunately, the mining company DID decide to go back for the miners, but the recommendation here would be that the mining company should have IMMEDIATELY enacted humanism and done everything in their power to save the miners instead of assuming it was too late.

Predictable Surprise Recommendation: Predictable surprise is the notion of failing to learn from failure. This applies to the mining crisis because the mining company ignored a scanning failure and an integration failure. As far as scanning failure, the mining company failed to take seriously the previous (minor) mine collapse in the same mine. The integration failure builds on top of this because if they had valued the seriousness of THAT failure, they would have recognized that the same thing could happen again. The recommendation here would be that the mining company should have seriously considered the past failures of this mine and acted accordingly - which would have been to NOT mine there.