

THESIS

**How does psychology correlate with and have an impact on
decision-making process in outdoor leadership?**

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ABSTRACT

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This thesis will explore the psychological factors influencing decision making process among outdoor leaders, with a particular emphasis on technical, tactical, physical and psychological (TTPP) models. While all the components of the TTPP model are crucial for leaders, coaches and instructors, the psychological component receives less attention. This thesis will address the gap by planning and executing a small sea kayak expedition in Norway for 360North, with a focus on the psychological aspects of decision-making within the outdoor community. I have focused on Heuristic traps and Dragons. After the practical expedition to Norway, surveys and interviews, I have gathered some important information. The top four results for the heuristic traps which effects leaders more included; familiarity, commitment, acceptance and expert halo. The practical expedition gave a me a good opportunity to discuss the psychological concepts in outdoor leadership.

Keywords: Heuristic traps, Dragons, Psychology, Decision making, self – reflection

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1 INTRODUCTION

In my thesis I will be focusing on how various different psychological aspects can have an impact positively and negatively in your decision-making process as an outdoor leader. Psychological aspects can be a very broad topic, therefore I will specifically be researching and focusing my thesis to Heuristic Traps and Transforming Dragons. I will discuss more these concepts in my knowledge base and throughout my project. I will be executing a short trip for my commissioner in Norway which will give me an opportunity to look a lot more into this topic and help me frame my thesis. I chose this topic as it is less discussed in the outdoor community than technical, tactical, and environmental factors in outdoor education.

My commissioner is also very interested in this topic, as he is an experienced outdoor educator and advanced sea leader. Since both of us are passionate about constantly growing in our professional and personal development, this led naturally to the specific topic for my thesis. I am fortunate to have been able to paddle and work in both the US and Europe in a range of different outdoor activities, and met a lot of coaches. This enabled me to work with a lot of knowledgeable co-instructor leaders in the industry, which gave me broad international insights around this important topic in outdoor leadership.

In the thesis, I will be executing the practical expedition for 360North. This will allow me to frame my thesis and allow me to talk to folks in the outdoor industry around the topic of heuristic traps and other subjective factors that can have an impact on decision making. I will perform a 2-day sea kayaking trip in Norway, where I will execute informal interviews with my participants to gather more information. Surveys will also be taken place to reach out to the wider community in the outdoor field to gather more information. These results will be gathered into one area and then I will look out for the most common answer throughout the results.

1.1 Commissioner

The commissioner is 360North Collective and Oscar Manguy is the representer of that company. 360North is a global media company that documents outdoor and urban adventures through photography and videography, while upholding the 'Leave No Trace' ethos. Oscar Manguy, a Mexico native residing in Finland, travels globally producing media and also works for the National Outdoor Leadership School (NOLS) in Patagonia, Baja California Sur, and Alaska. Oscar has done a lot of training with various different Kayaking schemes all around

the world. At the same time, he travelled the world to do many personal trips in packrafting, sea kayaking and white-water kayaking. He is also an advanced sea kayak leader in internationally recognized qualification systems. Oscar also works for Outdoor academy in Finland where they participate in back packing trips. As he travelled, he also documented those experiences through photography and videography. 360North was created by Oscar Manguy and Chris Alfthan in the summer of 2018. They are both photographers who dreamed of creating a space where media is used to document and share values and experiences of companies and individuals in both outdoor and indoor spaces. 360North is always looking to expand their product to different places around the world to share experiences and adventure through media.

1.2 Need

For the project, my commissioner requested me to execute a short overnight kayak trip in Norway to explore some potential future routes. The goals for 360North include coaching relevant paddle skills course in Lake Saimaa in Finland. 360North typically follows a linear progression for his clients to be able to paddle in Norway, which does not involve getting qualifications, while focusing more on skills and progressions.

Oscar is an outdoor educator and advanced sea kayak leader, and is interested in the psychological aspects specifically looking into the Heuristics of decision-making within his work at 360North and NOLS. This gave an opportunity to execute the short overnight kayak trip to Norway, the process of this expedition will also allow a lot of opportunities to research and discuss the psychological aspects in decision making. This project presents an opportunity to positively impact the outdoor leaders in the community. Likewise, we have been looking into a future partnership working together in Finland, Sweden and Norway and we are seeing how we can make it work.

1.3 Objectives

This practical thesis has several objectives. First, I will investigate factors impacting the psychological component of decision-making and confidence in leadership roles. I will read "Transforming Dragons: How to turn fear patterns into personal power" by José Stevens, PhD, to understand internal traits and ways to overcome them. I will also explore heuristic traps in

decision-making, including various biases described by Daniel Kahneman in his book, “Thinking, Fast and Slow”.

Second, I will create an online survey for outdoor leaders and send it to several professionals within my network in the USA and Europe. This tool will prompt the recipients to reflect on psychological performance in outdoor leaders, fostering self-awareness. The feedback from this survey will also help to gather and analyze information and views of different people with a range of backgrounds about the topic of decision making.

Third, I will be using this small scouting trip to Norway trip for my commissioner to help me frame my thesis while I consider psychological aspects in decision making, complete the survey and analyze the results. Norway should give me an opportunity to help expand my knowledge base as well to meet and talk to outdoor leaders to gather information for my research and development. This will allow me to narrow and organize my thesis into areas of most relevance, avoiding an overly broad approach. I hope this will allow me to get a better picture by obtaining different views from my coaches and mentors. All of this will also allow me to meet the needs of Oscar Manguy from 360North, my commissioner.

2 KNOWLEDGE BASE

In this section, I will write about various theories and concepts that will support my thesis. I have gathered this information by researching via the internet as well as reading a book and various relevant articles. I also applied concepts I learned in Humak studying adventure and outdoor education as well as just working myself in the field and while talking to people in the industry.

2.1 Mental side of decision making

An outdoor leader is someone who guides, mentors, instructs and coaches a person or group to achieve their needs and goals when participating in outdoor activities. In Humak, we have learnt about interpersonal and intrapersonal skills of leaders. Leader needs many intrapersonal (thoughts and feeling from within) and interpersonal (how the person interacts with other people and the external surrounding) involving others qualities. They need to have good group management, decision-making and problem-solving skills, in addition to helping the team or person deal with inevitable failures through the process while attempting to achieve their common goal. Leaders need to take into account external (Interpersonal skills) and internal (Intrapersonal skills) factors to make sound decisions. It is an essential part of the process to ensure the physical, mental and social safety of oneself and of group members, as well as achieving the group goal.

(Investopedia Jason Fernando 2022, October 03) mentions that there are two main decision-making processes, according to Daniel Kahneman; slow decision making and fast decision making. Slow decision making is the process when you can gather data and have time to process the information slowly at your own pace. This is the type of decision where you have a lot of planning, communication, and researching, and where you have a lot of time to think through those decisions. An example of this in outdoor adventures is tidal planning and route planning the night before an expedition. Fast decision making, in contrast, is when you must change decisions quickly and unexpectedly, reacting to the environment around you. These are rapid decisions associated with some risk/risk assessment, resulting in a quick change of plan. Examples include reacting to a capsized in a tide race or seeking land when there are unexpected weather/water changes that were unpredictable beforehand.

(Verywellmind Kendra Cherry MEd, 2022 November 08) on the first paragraph defines Heuristics as mental shortcuts that allow people to solve problems and make judgments quickly and efficiently in the brain which help with the decision-making process. We all make thousands of subconscious decisions every day in our lives, which can be very useful. These heuristics reduce the mental energy required for some tasks to allow our brains to focus on other, more demanding tasks. These can be really important in our decision making as a leader and takes a lot of training and experience. On the other hand, these heuristics can create “biases” where we make inaccurate decisions due to the decision-making process being autonomous. According to the Merriam-Webster EST.1828 the definition of biases is a personal and sometimes unreasoned judgment Inaccurate decision-making process. As an outdoor leader could hinder the mental, social, and physical safety of a group, as well as the cohesion and team dynamics of a group, impacting achievement of the group’s needs and wants.

There are several factors that can hinder the decision-making process. I will mention and also talk about them in more detail below. This will help support the understanding of my thesis. The first things I would like to address are the internal and external factors that can have an impact on your decision-making. Internal factors can include innate values, beliefs, thoughts and feelings. These factors can be positive or negative. It is important to develop positive internal factors, as they lead to a better decision-making process. Your values and philosophies as outdoor leaders, which can help guide you when making decisions, can be a challenge. Negative internal factors can be detrimental to decision-making; for example, a fear of failure, a lack of confidence, being a perfectionist, etc. (Tversky, A. and Kahneman, D. (1974). Judgment Under Uncertainty: Heuristics and Biases. *Science*. 185(4157), 1124-1131.)

There are also a few external factors that can have an impact on the decision-making process. (Dietrich, C. (2010). "Decision Making: Factors that Influence Decision Making, Heuristics Used, and Decision Outcomes." *Inquiries Journal/Student Pulse*, 2(02) PG 1/2/3 The place you were born, cultural factors, maturity, and socio-economic status could all play a role in making decisions. All these factors shape who you are as a leader and the decisions you make when leading other people. Past experiences can also impact future decision making. Juliusson, Karlsson, and Garling (2005) indicated past decisions influence the decisions people make in the future. It stands to reason that when something positive results from a decision, people are more likely to decide in a similar way, given a similar situation. On the other hand, people tend to

avoid repeating past mistakes (Sagi, & Friedland, 2007). Together, heuristics and factors influencing decision making are a significant aspect of critical thinking (West, Toplak, & Stanovich, 2008). There is some indication that this can be taught, which benefits those learning how to make appropriate and the best decisions in various situations (Nokes & Hacker, 2007).

2.2 Heuristic traps

Heuristic traps can be common in outdoor leadership when leaders aren't aware of them. These traps can negatively impact the decision-making process, which has some risks and consequences related to those decisions. Herbert A. Simon was one of the first people to describe heuristic traps in the 1950s. In the outdoor learning field, this concept was initially brought about to explain the subjective views for avalanche safety, but it is also relevant to sea kayak leaders. Heuristic traps are also known in the outdoors by the acronym "FACETS" to help people remember what they stand for. The heuristic traps under discussion are: familiarity, acceptance, commitment, expert halo, tracks and scarcity. These are all subjective factors.

Familiarity = Something familiar feels safer than the unknown. Therefore, it is easier to underestimate the conditions, even if there are consequences and risks involved with that decision.

Acceptance = A desire to fit in with and please other people, which puts you in more hazardous situations. People need to feel safe and feel like they belong into a community.

Commitment = Forces you to continue. This can be common when a trip is being planned for a long time or you have a time goal to meet.

Expert Halo = Trusting someone who is an expert blindly. Normally people who look up to a leader who has the gear and perceived as being knowledgeable when they are not as competent as they seem.

Tracks = If another person crosses something safely, it must be also safe for me to cross. (Without having gathered all the information prior to execution)

Scarcity = Something is good and rare, we must go, otherwise we miss out on a lot. For example, good weather, tide snow window.

I think the first step to overcoming these heuristic biases is to educate yourself to become aware of these traps. Then, you must accept and be accountable through self-awareness and "self-

leadership” that are two of these subjective factors. Then, being humble and not letting yourself fall into the traps will help to make good decisions outdoors as a leader, reducing risks and/or negative consequences. Being humble enough to listen to constructive feedback allows our professional development as a leader, and helps us maintain a growth mindset.

2.3 Transforming dragons

As part of my research, I read the book “Transforming your Dragons - How to turn fear patterns into personal power,” by José Stevens, PhD. In this subchapter, I will discuss the parts of the book which stood out most for me. Stevens uses a metaphor for your “dragons”, where he guides you through becoming self-aware of your personal traits, facing your fears and guiding you through the ongoing process of overcoming those traits. Below I briefly mention and explain the seven types of dragons discussed in the book. I found this an interesting framework, the fact that throughout the book Steven uses the image of dragons, which immediately triggers your imagination, while reflecting on your own personal traits. Page 14 lists the seven types of “dragons” that are personal traits to which each of us might relate:

- *Dragon (Arrogance)*: “A fear of vulnerability, as well as the fear of being judged negatively; confusion over self-worth.” These people have a lot of strict boundaries by protecting themselves in a box. They struggle with personal self-worth, self-efficacy, and often doubt themselves.
- *Dragon (Self-Deprecation)*: “The fear of being inadequate or poorly equipped in life; low self-esteem, sometimes called inferiority complex.” These people lack the understanding of boundaries and do not respect or understand their own boundaries.
- *Dragon (Impatience)*: “The fear that time will run out” These people tend to rush and not be able to slow down and live in the moment. Tend to have a “poor sense of where they are”.
- *Dragon (Martyrdom)*: “The fear of being trapped by circumstances or outside forces”. These people are opposite of the spectrum, and they do not have any boundaries while still showing more control.
- *Dragon (Greed)*: “The fear there is not enough to go around”. These people tend to intrude on other people and not respect other people's boundaries.

- *Dragon (Self-destruction)*: “The fear of losing control”. These people have two types of boundaries. They tend to get a bit defensive about intimacy, and they are also poor in respecting other people’s boundaries.
- *Dragon (Stubbornness)*: “The fear of authority and sudden change” These people are stricter with their own boundaries than with those of others.

There are dragons’ traits which work together, and which link into your personal traits. It is normal for someone to relate to two dragons in their personal traits.

Stevens discusses towards the end of the book how you can “transform your dragons to develop happiness” with yourself. He talks about wakefulness; to be truly present living in the moment of your life. Not worrying about the past and not overthinking the future. “Live your own life”. He mentions “maturity” a lot throughout the book, how it changes as you grow up, and how it can get hindered. With maturity comes the ability to channel and consciously change your behavior. By enjoying the process of life, rather than worrying too much about the outcome.

Another method of transforming your dragons discussed in the book is to focus on “concentration”, which is a mindfulness practice. This is another way to disconnect, to reconnect, to become self-aware of how you feel. Here are some ways to practice concentration mentioned in page 369 in Stevens’ book:

“Simple focus - focusing on a specific experience created by your senses. For example, you isolate a single sound from the environment.”

“Shift focus - the next level of concentration involves moving smoothly from one type of focus to another, from inner to outer focus, from single focus to soft focus.”

“Exchange focus-interchange your levels of focus”

By practicing this, you can achieve the internal and external attentional focus that you need to make decisions, while also having full control of your thoughts and feelings in your mind. It also gives you some self-discipline of your mind to control the inner fear (your dragon). By being self-aware of who you are and the strengths and weaknesses, you will increase your efficacy and the maturity of your thought process and decision-making process. Lastly, by focusing on mindfulness and concentration, it improves your overall health.

Likewise, you need to have “vision” in your life. This is mentioned in page 373 and is another way to transform your dragons. “Without a vision, you have no hope of transforming the dragon, because you do not know where you are going or why you are alive.” Therefore, finding purpose and things that you love is essential to support that vision.

Another section in the book on page 374 stood out for me, supporting the other knowledge base concepts addressed in my thesis, and linked with other topics: *“Vision is only possible when you see the big picture of how your actions influence the world around you. The context or background of your life is the ground upon which your will acts. Your will helps you start a business, but the context of your life is what determines whether that business is in harmony with your own and other people’s best interest.”*

On page 16, there is a list of consequences once you conquer your dragon. This is essentially when you reach enlightenment with your inner self, find acceptance, and find an intentional coping mechanism to manage your dragon.

“When you defeat your dragon, you will:

- *Be more present*
- *Have more energy available to make choices*
- *Take actions that are revolutionary in nature*
- *Have the power that comes from being truly at peace for the first time*
- *Be happy*
- *Be a magnet and role model for the people around you*
- *Be a genuinely attractive human being, not attractive simply because of your dramas*
- *No longer attract those people who are compulsively drawn to your weakness*
- *Find compassion for others still in the grip of their own dragons*
- *Be able to assist others without being entrapped yourself*
- *Be truly powerful for the first time in your life”*

Stevens mentions that “learning tolerance is a good place to start. Learning unconditional love is a greater challenge.” This is true because learning to accept your strengths and weaknesses and finding ways to make a weakness a strength for something else, is essential for happiness. Having a growth mindset and always being willing to try and learn is important in transforming your dragon. Stevens sees much broader benefits to society from the process he describes, as

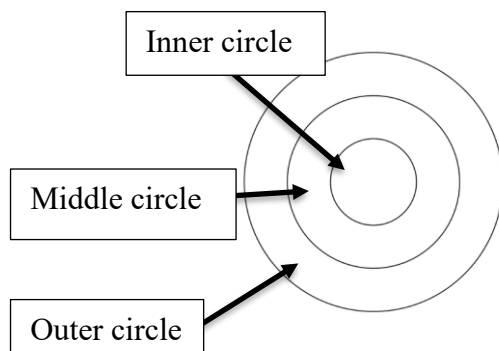
he states in the book's final sentence: "The journey of transforming your dragons helps the human race evolve towards the ultimate destiny of integration, peacefulness and transformation".

2.4 Summary of the knowledge base

Knowing your values and respecting who you are as a person is the baseline of the kind of leader you will be and what sort of decisions you will make. Educating yourself and having an "always learning" mentality, aiming to constantly grow in competence. Likewise, channeling your attentional focus to the surroundings in the environment and having good vision and action to help make decisions. It is important to be self – aware and have accountability maturity. Being able to remember you are number 1, if you want to be able to look after the group. That is the summary of my knowledge base and some of the factors that can influence your decision making.

3 METHODS FOR RESEARCH BASED DEVELOPMENT WORK

In contrast, qualitative data is about the thoughts and personal opinions of other people, leading to a more subjective assessment. I will be focusing primarily on qualitative data analysis throughout my thesis. This includes survey results and interviews. I believe that subjective, qualitative data would be more relevant achieving the outcome to my thesis. This is because throughout my project I am focusing on subjective data that has many different views and values in all individuals. Therefore, gathering this kind of data will give me more insightful ideas around the concepts of Heuristic traps and Dragons.



The way that I structured my research-based development work is by visualizing gathering data through 3 circles. The circles reflect levels of comfort when measuring risks. The inner circle represents my own thoughts and views working in the industry for a few years, as well as my knowledge base. I will be expressing my own views in the conclusion. The middle circle represents my participants on the expedition to Norway. This is a very small group - 2 people – but I was able to extensively interview during the Norway trip and have a lot of information about and from them.

The participants for this trip were chosen very intentionally, Lastly, the final circle is the people to whom I sent out the surveys. I've sent them out 20 surveys with leaders in the outdoor industry. The people who I chose for each of the circles when gathering my data for my research method, were people who were chosen very intentionally to ensure the objectivity and reliability of my results.

Middle circle - The short Norway trip was a great way to gather a lot of information about heuristic traps and Dragons for this project with 360North from a variety of people, specifically from my participants but also from people working in the outdoor industry. It's also part of my research development as it allowed me to frame my thesis by keeping me on track to fulfill my outcome, bring up many opportunities to discuss decision making while setting myself time goals for my thesis. It allowed me to meet new people and talk about various concepts for decision making, some of which I discussed in the section about my knowledge base. Hearing many different and similar views allows me to have a growth mindset and explore and think about different theories and ideas as I gather results.

For my Norway expedition, my participants had a few years of experience working in the Outdoor field as leaders, guiding and coaching paddlers and sharing their knowledge to their students. I trusted their answers and input, I have a long-term connection and have known them for a while. We have done multiple trips together and know how they work and their mindset as well as their role within the outdoor industry which is why I chose them for the Norway trip. They took a lot of time and sacrifice to train and work towards their qualifications. They always maintained a good attitude towards learning and developing themselves personally and professionally.

Despite some unexpected factors, my participants and I executed this overnight trip in Norway for my commissioner, where we discussed decision making and challenged our personal systems as outdoor leaders working in the industry. All of these changes of plan and uncertainties were a very realistic example of what we all have to do at our jobs when leading people in the outdoors. This also gave us a lot of time to discuss our own leadership and decision making. I did not pre plan the interview questions, I set an outcome I wanted out of the trip and asked many questions and discussions which flowed and started naturally in conversation and the environments we were in. I made sure I actively listened to help me frame topics and concepts to find out more information around decision making and heuristic traps. I ensured that the interviews were relaxed and more taken place in a conversation throughout the trip. I've documented some of the answers, thoughts and ideas in my coaching notebook. Which is where I journal, reflect and lesson plan when I lead people outdoors. This allows the environment to be relaxed and more feel like a normal trip. This led to a lot of follow up questions and deeper conversations around heuristic traps and other subjective factors in decision making.

I interviewed them both and discussed some important topics around decision making for my thesis, to get more point of views from people with their expertise. This ensured the reliability of my middle second results in receiving feedback and discussing the decision-making topic during the Norway trip.

Third Circle - The main goals for the survey are to find out strengths, weaknesses and FACETS in outdoor leadership. I will send out several questionnaires and request constructive feedback. Likewise, I will conduct interviews with a few of the people to help expand on the issues addressed in my survey and in the thesis project overall. I will send this out to 20 people whom I chose intentionally due to their work in the outdoor industry, as well as the fact that I trust them and know they will give insightful and true answers using their expertise and knowledge. This

increases the reliability of my research method. Survey questions which I sent out to people and can be found in the Appendices. The survey questions are in a word document and that allows people to choose how and in what document they answer. Once the answers come through, I will gather all the answers into one document to allow all of the answers to be shown in one area. This ensures organization when gathering qualitative results for my project. At the same time during the process of surveys many people wanted to read the results outcome from my project. Therefore, gathering the results one area document will allow me to do that for people.

I have included some open-ended questions; these are questions that provoke more reflection, especially when writing thoughts down. I also included some closed questions where I wanted the respondent to give a short, clear answer. Lastly, I also provided some information about heuristic traps so they can be aware of some of the concepts I discussed previously in my thesis. This will allow people to be aware of these traps and to reflect on them in examples of their own leadership, as well as outdoor leadership as a whole. My survey in gathering my information is not being able to ask follow up questions to regards of their answers. However, some of the survey answers came from people that I have worked with all summer so was able to follow up with some of the interesting thoughts they have in their survey answers.

In addition, I will also be asking my mentors, coaches and participants for constructive feedback and to share their points of view on the elements on which I will dive deeper. This will allow me to have a wider understanding of key elements and help introduce me to different perspectives. All of this will allow me to achieve my “double goal” of getting a different perspective on an element I am looking into more deeply while giving me constructive feedback for my thesis overall.

I chose to compare and find similarities in the point of view and feedback provided by coaches, mentors and co-workers to see if there are any trends and differences. This will allow me to analyze the “why” depending on the experience and ideas of different kinds of colleagues and participants, which should allow me to get a better understanding. My coaches, co-workers and mentors have many years of experience, so their input will clearly help raise ideas I might not think of by myself. But it will also be productive and insightful to investigate my client’s point of view and see any similarities or differences from the views of more experienced practitioners. This gives a wide lens on the issues being considered in decision making as well as my

own views and will keep my thought process within the framework of my thesis. At the same time, it will provide a logical chain of knowledge and information.

4 RESULTS AND PRODUCT

4.1 Survey results

In my research, I was mostly looking for personal and professional points of view and qualitative data, seeking a wide variety of opinions from a large amount of people in the outdoor world. My survey results were also supported by my knowledge base research; Heuristics and Transforming Dragons. This allowed me to make links and compare a wide variety of data. In this section, I will be sharing specific linking from the survey's qualitative data with my knowledge base. I will be focusing on the results of my middle and outer circles of people which I discussed above in my research methods.

In my results, I got a wide variety of results from my survey and interviews about the heuristic traps and other subjective ideas. I have picked out the top 4 heuristic traps which were mentioned the most in majority of the answers and talk a little more about them. Once survey results came through, I consolidated them into one document so that I could see all the results. This was also intentional for when people read my thesis, they are able to access the results easily in one area. Heuristic traps play a massive psychological factor in decision making and this can play a big role in the outcome. I will focus on the top 4 that came up in my survey results and compare how that applies to my knowledge base. In my survey results, the top four heuristics which are big factors which can impact leaders' decision making were familiarity, commitment, acceptance and expert halo. All of the subjective factors of decision making is important. However, I wanted to focus on the top 4 as in the surveys and interviews these are the ones that have come up the most amongst the answers.

Familiarity is a very common heuristic trap. As outdoor leaders we often work in very similar environments, doing the same itineraries all season long, sometimes for multiple seasons. Therefore, at times it can be easy to potentially take a higher risk despite the group not being completely competent yet. In my survey results something stood out to me to explain this well: "Familiarity - This is because they have been taught something and that worked in the scenario in which they learned it but then apply it in scenarios where some factors have changed, weather, hazards, group, etc. They feel familiar with the terrain or the management style but are not considering the other factors due to complacency."

Acceptance is another important heuristic trap. We are social people and we naturally seek deeper connections with people. Acceptance traps can put people in some dangerous situations because they might do something at a higher risk to try to prove to other people that they fit in. One of the answers from the survey was “Acceptance traps - This is because new leaders see themselves in those around them and desperately want to fit into the mold and to belong. This is a natural developmental need for humans, and also leads to leaders doing things that are outside of their comfort zone and often ability because it is what their peers are doing.” I fully agree with their statement because I have seen it happen to many people, including myself during the time I have been working in the industry. Building trust among the instructor coaching team is essential when making decisions and analyzing the group.

Commitment traps, some of which are external, may cause pressure for example when working for an organization planning a trip, but when it goes not according to the plan due to external environmental or group factors. This disrupts your original itinerary and can put a lot of pressure and stress on the instructor. This is a good subject for self-reflection and awareness, so leaders can know when to turn around. One other answer from the survey with which I agree: “Once we make a decision to do something, I want to see it through, no matter how the conditions are changing. But the mark of a great leader is sometimes just knowing when to turn around. When to quit before someone gets hurt.”

Lastly, regarding the risks arising from an Expert Halo, one of the survey respondents said “Especially in a professional setting, where dynamics of power and experience are implemented formally and result in different wages, it is too easy for instructors with less experience, but rarely less common sense, to overlook something they see as a hazard because the “leader” isn’t concerned.”

Specifically, to sea kayaking any of these impacts a leaders decision making. I think that all outdoor adventure and people in the outdoor industry have a similar mentality with slight differences in the activity. However, from my experience from my observations in sea kayaking acceptance is common and speaking from experience. This is because the guide/instructor/coach is trying to build rapport with their students and clients to be able to build trust and mutual understanding to meet their needs and wants. Likewise, we all need to feel safe into a community to feel a sense of belonging which is a need to thrive. All of these traps are super valid and they all need to be taught more around the outdoor industry for people, so they can become more self-aware and can catch themselves prior to making decisions.

Transforming Dragons was also relevant to a lot of outdoor leaders who are lacking confidence in themselves and in their decisions. This is something that I struggle with in my own leadership and many of my other co-instructors and coaches mentioned similar struggles. The two dragons which a lot of leaders from the survey noted are arrogance and self-deprecation. Regarding arrogance, one mentioned “A fear of vulnerability, as well as the fear of being judged negatively; confusion over self-worth.” These people have a lot of strict boundaries by protecting themselves in a box. They struggle with personal self-worth, self-efficacy, and often doubt themselves. A few people also noted a tendency for self-deprecation, with one saying “The fear of being inadequate or poorly equipped in life; low self-esteem, sometimes called inferiority complex.” These people lack the understanding of boundaries and do not respect or understand their own boundaries.

In other respects, the methodology from Transforming Dragons was not seen as fully relevant to people in the outdoor industry that I have interviewed, nor did they believe it effected their decision making. However, by being self-aware of your own dragons is to have more insight about yourself as a person, having a growth mindset and allowing yourself to be a better person.

4.2 Practical Expedition

The Norway expedition created a good environment and a lot of opportunities to discuss heuristic traps. This is because, during the planning execution and reflection of the trip allowed me to talk to many people in the process as it helped me frame my research. The expedition was executed in Lofoten in Norway over 2 days and 1 night in the fjords. At the same time, I have also had a lot of time with my participants where we had a lot of time to discuss a wide variety of topics. I have also received some feedback on my leadership specifically relating to decision making during the Norway trip. I have a strong growth mindset, often asking questions and trying to learn, which keeps me always progressing with my skills and having humility when I make decisions. When I make decisions with my co-workers, we would weigh out all the risks prior to finalizing the decision. I would ensure that the people in my group and my other instructors have an opportunity to voice their opinions prior to making that decision. Something for me to improve which other people mentioned is to be able to trust my intuition better in the areas which I have experience. I would agree with that; I know what I know, what I still do not know, and what I need to still work on. This mentality is a reminder to be confident in what I

know and but to still have a growth mindset and humble and weigh out the risks to make good decisions.

In one of the interviews a question and a discussion came up from one of my mentors which got me thinking a lot about heuristics as a whole. “Why are we so afraid of heuristics?” Heuristics help us make decisions every single day making our lives easier. I don’t think we need to be afraid of heuristics. What I do think is that we need to be educated, trained and be aware of them to be able to identify when heuristic traps may affect our decision making when we are leading groups. I think training and experience in skills leads to intuition, and this kind of intuition can help with risk management, knowing when to make decisions through humility. Which allows you to rely on yourself and to be accountable in your decisions. From my experience I tend to fall into the acceptance trap. I value community and a sense of belonging within people around. However, I am aware of it and working on my thought process and my own values frequently. The best kind of leaders are leaders that can make decisions that participant don’t want. That can be very hard sometimes, but it is essential for risk management.

5 CONCLUSION

In conclusion, I will focus on sharing my own thoughts and observations, which is a part of my inner circle of research methods. These insights were formed throughout my whole thesis project as well as through my own experience in this outdoor field. How you make decisions depends on the people you are with, whether it is just you and your friends, or when you are leading and coaching some kind of group for which you have a responsibility. You may take more risk when you are not leading a group because you are self-aware of your competency, understand the risks and you have trust with people in your group. When you are responsible for others you would take decisions with an extra caution, taking your group into account but also your responsibility as a guide or leader. Different countries and cultures have different perspectives, values and views on leadership structures and frameworks. Therefore, it is important to keep talking and exploring different places, and to keep sharing information and knowledge with one another.

Having self-awareness and a growth mentality, I know what I know, what I don't know and what I still need to learn. A growth mindset allows for a healthy relationship with decision making and the way you present yourself as a leader. On one of the interviews one person mentioned something which stood out to me and with which I agree: "One that comes to mind is humility. Leaders cannot be so concerned with how they will be perceived by others, and cannot be so proud they don't ask questions or seek advice. If they make mistakes or don't know something, they take ownership because of that humility. Leaders who lack humility make decisions for the wrong reasons, often with internal focus. A second is a collaborative or consultative style. Leaders who attempt to make all the decisions fail to gather additional inputs or perspectives they may not have considered and thereby make shortsighted decisions. A third is trust. No leader can do it alone, yet many attempt to. Leaders need to trust the other members of the team with tasks, including decision making, or they will burn out or something important will be missed. Other team members will not feel trusted and be less willing to share perspectives that make better decisions possible. And if the leader tries to please people too much and listens to the group against their own judgement, that can get dangerous as well."

Something that has helped me as a leader and with my decision-making is a framing philosophy for myself as a leader. This will change and develop overtime as you grow more professionally and personally. The leaders that have been in the industry for many years also talk regularly to

others in the industry, and this can also guide them through managing risks and making decisions. This can help when analyzing external risks and meeting the needs and wants of the group (within reason) and generally taking into account all the external factors.

Different organizations have different policies and procedures, including with risk assessment frameworks. This is logical and can also help guide you to make decisions and manage risks appropriately. One interviewee said, "I think being able to hold a template for formal decision making in one's mind is essential. Having a methodical process, which comes from research, and being able to make decisions using that process even if only executed in the persons' head, makes for more rational decisions. With that said, a generally rational, and logic-based brain is helpful, but not essential. What is essential is that someone who does often make decisions with emotions being a big factor, is able to recognize that as either a healthy contribution or as a distraction in a professional setting." I think is good to have some kind of logical framework you follow mentally when decisions get harder. That can help to reduce influences of internal psychological factors and other heuristics traps to making appropriate decisions in challenging and stressful situations.

Taking a step back to reflect, keeping tabs on your dragons and FACETS through meditating, physical activity and living in the moment, focusing on yourself and your mind, can reduce stress and allow you to have better self-awareness. This helps your mind and body work together, becoming more intuitive with experience, and lead to better decisions. This is consistent with what I learned via research in my knowledge base, particularly from the book, *Transforming Dragons*. Focusing on being the best person you can be will make you a good leader.

Depth of experience and knowledge is really important for any outdoor leader taking responsibility for people in the outdoors. Keep focusing on your own development, enhancing your skills and qualifications, taking online classes, talking with and learning from experienced people - these are all important. One other interviewee, one of my coaches, said "Without depth of experience and knowledge, leaders are unable to see the many potential ways that a system can fail, group management can impact risk, or to see the multitude of hazards both objective and subjective and understand how they interact with the big picture. Ability to see and understand multiple ways of doing things. With a depth of knowledge, you can see pros and cons of different decisions, if you only know/understand one way of doing something you can never consider making a different choice." At the same time having a strong assessment of the group you are

leading is a crucial skill when making decisions. Building a learners group profile through establishing rapport and observations can allow you to make a better assessment on how individuals are doing.

My survey and my interviews showed that many existing leaders, and not only leaders new to the industry like me, struggle with Imposter Syndrome. In this context, ongoing training and exposure in environments in which you will be working can increase confidence and self-efficacy. That experience and training leads to self-awareness and intuitions which all support your decision making, and this in turn will lead to more accountability as a leader. This further supports your own actions and decisions and expectations as a leader and can reduce decision making traps that may otherwise affect you psychologically. Always maintaining a growth mindset can promote the humility which is crucial for any leader, and can help build trust with your co-instructors and the clients you are leading.

Both the results from the interview and surveys were similar in their answers, which is expected. The results show that we can continue to do more and keep on educating one another. If leaders are aware of the subjective factors, they can catch themselves prior to making decisions. I think if I had more time in developing my thesis, I would create a document for leaders to be able to reflect through prompt questions and it being a platform into looking back and tracking success while setting more goals in the future. Overall, I feel like I have met the objective of this project and.

REFERENCES

Published -

Kruger, J., & Dunning, D. (1999). Unskilled and unaware of it: How difficulties in recognizing one's own incompetence lead to inflated self-assessments. *Journal of Personality and Social Psychology*, 77(6), 1121–1134.

Article - Advancing Self-Efficacy and Intuitive Decision-Making Calls to Action By Barry B. Leslie Kansas State University Jon Moilanen and Kansas State University

Book - Transforming your Dragons: Turning personality fear patterns into personal power. By Stevens José

Article - Doing the right thing, in the right place, with the right people, at the right time; a study of the development of judgment and decision making in mid-career outdoor instructors. By Alice Mees and Loel Collins

Article - The role of planning in outdoor adventure decision-making by Mike Boyes, Tom Potter, Soren Andkjaer, Martin Lindner

GÁL PETER, MRVA MILOŠ, MEŠKO MATEJ: *Heuristics, biases and traps in managerial decision making*. Acta Universitatis Agriculturae et Silviculturae Mendelianae Brunensis, 2013, LXI, No. 7, pp. 2117–2122

Proc. WildernessRiskManager's Conf. Oct.26–28, 2001, Lake Geneva, WI, pp. 16–29. Decision making for wilderness leaders: strategies, traps and teaching methods Ian McCammon, Ph.D.*

Book - Sea Kayaker Deep trouble True stories and their lessons from sea kayaker magazine by Matt Broze and George Gronseth

Book – Mind Traps Unraveling the Labyrinth of cognitive biases and Heuristics

Non – Published -

[https://www.investopedia.com/terms/d/daniel-](https://www.investopedia.com/terms/d/daniel-kahneman.asp#:~:text=Daniel%20Kahneman%20won%20the%20Nobel,Princeton%20University%2C%20Open%20Scholar.s-)

[kahneman.asp#:~:text=Daniel%20Kahneman%20won%20the%20Nobel,Princeton%20University%2C%20Open%20Scholar.s-](https://www.investopedia.com/terms/d/daniel-kahneman.asp#:~:text=Daniel%20Kahneman%20won%20the%20Nobel,Princeton%20University%2C%20Open%20Scholar.s-)

<https://www.verywellmind.com/what-is-a-heuristic-2795235>

<http://www.inquiriesjournal.com/articles/180/decision-making-factors-that-influence-decision-making-heuristics-used-and-decision-outcomes>

<https://personalityspirituality.net/articles/the-michael-teachings/overleaves-the-structure-of-personality/>

<https://snowdoniamountainguides.com/instructional-art/technical-tactical-physical-psychological/>

<https://ricardo-vargas.com/podcasts/cognitive-bias-the-dunning-kruger-effect-and-impostor-syndrome-part-3-of-3/>

<https://www.merriam-webster.com/dictionary/bias>

<https://www.outwardbound.org/blog/what-does-outdoor-leadership-really-look-like/>

<https://outdoorleaders.com/outdoor-leadership-training-tips-blog-series/3-es-of-rapid-decision-making-skills-in-outdoor-leadership/>

<https://www.nols.edu/en/expeditions/core-curriculum/>

<https://www.outdoored.com/articles/risk-assessment-safety-management-rasm-complete-risk-management-model-outdoor-programs/>

<https://suebehaviouraldesign.com/kahneman-fast-slow-thinking/>

<https://www.verywellmind.com/what-is-a-heuristic-2795235>

<https://thedeisionlab.com/biases/heuristics>

<https://wilderlife.nz/2017/04/understanding-heuristic-traps/>

<https://thinkingispower.com/guide-to-the-most-common-cognitive-biases-and-heuristics/#:~:text=Think%20of%20heuristics%20like%20guidelines,process%20information%2C%20and%20perceive%20reality.>

<https://hbr.org/1998/09/the-hidden-traps-in-decision-making-2>

[https://socialsci.libretexts.org/Bookshelves/Counseling_and_Guidance/Career_and_Life_Planning_\(Martinez_and_Shaker\)/04%3A_Decision_Making_and_Goal_Setting/4.02%3A_Internal_and_External_Factors_that_Affect_Making_Decisions#:~:text=External%20factors%20are%20those%20that,a%20positive%20or%20negative%20way.](https://socialsci.libretexts.org/Bookshelves/Counseling_and_Guidance/Career_and_Life_Planning_(Martinez_and_Shaker)/04%3A_Decision_Making_and_Goal_Setting/4.02%3A_Internal_and_External_Factors_that_Affect_Making_Decisions#:~:text=External%20factors%20are%20those%20that,a%20positive%20or%20negative%20way.)

<http://www.inquiriesjournal.com/articles/180/decision-making-factors-that-influence-decision-making-heuristics-used-and-decision-outcomes>

<https://www.simplypsychology.org/self-efficacy.html>

<https://positivepsychology.com/bandura-self-efficacy/>

<https://www.illinoisscience.org/2021/05/dunning-kruger-effect-imposter-syndrome/>

[https://en.wikipedia.org/wiki/Heuristic_\(psycho-](https://en.wikipedia.org/wiki/Heuristic_(psychology)#:~:text=In%20that%20sense%20they%20can,limitations%20to%20rational%20de-)

[logy\)#:~:text=In%20that%20sense%20they%20can,limitations%20to%20rational%20de-](https://en.wikipedia.org/wiki/Heuristic_(psychology)#:~:text=In%20that%20sense%20they%20can,limitations%20to%20rational%20de-)
[cision%20making](https://en.wikipedia.org/wiki/Heuristic_(psychology)#:~:text=In%20that%20sense%20they%20can,limitations%20to%20rational%20de-)

<http://www.sunrockice.com/docs/Heuristic%20traps%20IM%202004.pdf>

[https://www.researchgate.net/figure/Multidimensional-Model-of-Leadership-in-Sport-Chella-](https://www.researchgate.net/figure/Multidimensional-Model-of-Leadership-in-Sport-Chelladurai-1990_fig6_261842951)
[durai-1990_fig6_261842951](https://www.researchgate.net/figure/Multidimensional-Model-of-Leadership-in-Sport-Chelladurai-1990_fig6_261842951)

[https://sidewaysthoughts.com/blog/2013/04/autocratic-versus-democratic-leadership-are-you-](https://sidewaysthoughts.com/blog/2013/04/autocratic-versus-democratic-leadership-are-you-the-right-tool-for-the-right-job/)
[the-right-tool-for-the-right-job/](https://sidewaysthoughts.com/blog/2013/04/autocratic-versus-democratic-leadership-are-you-the-right-tool-for-the-right-job/)

APPENDICES

Survey Questions:

- 1.) What are strengths you think are important when outdoor leaders make decisions?
- 2.) What internal (thoughts and feelings) and external (surroundings) factors negatively influence leaders' decision making?

Heuristic traps are factors that can negatively influence the decision-making process, which can put people in hazardous situations in the outdoors. Self-awareness can be helpful to be more aware when making decisions while you are leading or spending time outdoors. Read through the information below prior to answering the remaining questions:

<https://westonbackcountry.com/blogs/news/the-human-factor-heuristic-traps-in-the-backcountry>

Video: <https://backcountrymagazine.com/stories/basecamp-tv-andrew-mclean-season-2-heuristic-traps/>

FACETS (Heuristic Traps):

- *Familiarity* = Something familiar feels safer than the unknown. Therefore, it is easier to underestimate the conditions, even if there are consequences and risks involved with that decision.
- *Acceptance* = A desire to fit in and please others people, which puts you in more hazardous situations.
- *Commitment* = Forces to continue
- *Expert Halo* = Trusting someone who is an expert blindly
- *Tracks* = If another person crosses safely, it is also safe for me to cross. Without having gathered all the information prior to execution.
- *Scarcity* = Something is good and rare, we must go, otherwise we miss out on a lot.

- 3.) Which one of these Heuristic traps do you feel outdoor leaders fall into most commonly when making decisions?
- 4.) What are the 2 most important strengths in your decision making as an outdoor leader?

Answers for Survey!

1.) What are strengths you think are important when outdoor leaders make decisions?

Answers

Objectivity, keeping personal goals secondary to safety goal and group goals

Patience. Slow is smooth, smooth is fast. Take a breath before acting to avoid acting rashly.
Ability to summon calmness/avoid panic

Learner's mindset - Keep learning and keep being approachable. Collaboration - The more eyes on the system, the through and redundant the checks are. On a purely statistical point of view, this mitigates the margins of error. Being aware of heuristic traps and decision-making blind spots - It's important to take a step back and reflect. Taking it slow and easy is always the more efficient way.

Promoting physical, mental and social safety aspects. Having realistic understanding of your own and the group participants capabilities and current mental/physical state.

Situational awareness – surrounding, group, self.

Risk awareness, mitigation and management skills

Group management skills and awareness

Adaptability and problem-solving

Communication (if assuming the decision is also communicated after)

Technical skills related to the situation/activity

Sustainability awareness and understanding

Willingness to listen, humility, excellent communication, competence.

Environmental skills to assess the environmental situation given f.e. weather, elevation, distance, route options, difficulty of terrain, animals, ...

Being able to let go of the goal and turn around and/or adjust the goal

Confidence about their decision

Group assessment to make a decision that ensures physical, mental and social safety of all participants

One that comes to mind is humility. Leaders cannot be so concerned with how they will be perceived by others, and cannot be so proud they don't ask questions or seek advice. If they make mistakes or don't know something, they take ownership because of that humility. Leaders

who lack humility make decisions for the wrong reasons, often with internal focus. A second is a collaborative or consultative style. Leaders who attempt to make all the decisions fail to gather additional inputs or perspectives they may not have considered and thereby make shortsighted decisions. A third is trust. No leader can do it alone, yet many attempt to. Leaders need to trust the other members of the team with tasks, including decision making, or they will burn out or something important will be missed. Other team members will not feel trusted and be less willing to share perspectives that make better decisions possible.

These could include prior experience, familiarity with location/environment, ability to communicate with others and ability to collaborate, looking at trends (weather/conditions), solid assessment of the group.

I think being able to hold a template for formal decision making in one's mind is essential. Having a methodical process, which comes from research, and being able to make decisions using that process even if only executed in the persons's head makes for more rational decisions. With that said, a generally rational, and logic based brain is helpful, but not essential. What is essential is that someone who does often make decisions with emotions being a big factor, is able to recognize that as either a healthy contribution or as a distraction in a professional setting.

I think that Confidence tempered with Humility is so important. Being confident in your own knowledge and experience while also being able to take suggestions and corrections and own your mistakes. Trust what you know and always, always hold space for what you don't know and be prepared to adjust. I also think that true Care and Empathy for the people around you will allow you to make the decisions that are right for the group. You have to understand how your decisions are affecting each person individually and how that is affecting the dynamics and morale of the group as a whole. And take into account each person's actual physical ability, not necessarily what they believe they can do but what you see that they can do.

Depth of experience and knowledge - Without a depth of experience and knowledge leaders are unable to see the many potential ways that a system can fail, group management can impact risk, or to see the multitude of hazards both objective and subjective and understand how they interact with the big picture. Ability to see and understand multiple ways of doing things. With a depth of knowledge, you can see pros and cons of different decisions, if you only know/understand one way of doing something you can never consider making a different choice. Foundational understanding of risk management and heuristics - This goes back to understanding the interaction of hazards and safety factors as Rick Curtis describes here : <https://www.outdoored.com/articles/risk-assessment-safety-management-rasm-complete-risk-management-model-outdoor-programs/> I also think that understanding heuristic traps and how individual and group social dynamics play a role in decision making is essential.

Inventorying your implicit biases of individuals/activities/places

Considering all the logical options, as well as what the group needs (if physical/emotional risk is not a factor)

Recognizing the objective and subjective hazards of the environment and group

Environmental Awareness

Group Awareness

Adaptability

Honesty

Experience

Level Headedness and ability to be calm

Being able to anticipate problems and worse case scenarios

TAKING EGO OUT OF THINGS!!! Not self-centering

A strong understanding of the sport as well all as loads of experience.

Clarity of the mind, being able to see the situation from an outside perspective. Staying calm and collected.

Outdoor Educators and Leaders should be able to make and manage decisions bearing in mind the primary goal of facilitating learning, by balancing risk taking and safe learning environment.

Technical competence – no matter what you are doing in the outdoors (hiking, kayaking, climbing), a strong understanding of the technical skills required will help inform your decision as a leader. Strong assessment of the group you are leading – Understanding not only what your skills are but the skills of everyone in the

group. Confidence – trusting the decisions that you are going to make especially when they need to be made quickly. Co-instructor relationship – trusting your team of leaders to back you up or give you feedback to better inform your decisions.

Ability to evaluate if the decision is urgent or not, and spend the appropriate time to make the decision. Ability to evaluate consequences and risks of different decisions - physical, mental and social. Ability to recognize own skills and experience. Communication skills to seek input to decisions. Communication skills to explain decisions to participants

2.) What internal (thoughts and feelings) and external (surroundings) factors negatively influence leaders' decision making?

Answers

Lack of confidence/need to prove themselves or overconfidence and being too comfortable with the area/sport

Going with the flow, accepting what others are doing as safe even if your gut tells you it isn't or you aren't performing your own risk assessment

Complacency and perception competency are some of the more prominent internal factors that affect a leader's decision making. While major changes in the surroundings usually invoke a heightened awareness to risk management and proactive decision making, micro changes in the surroundings tend to be ignored that can snowball into creating a situation where the consequences of poor decision making could be more dire.

Internal: lack of self-knowledge, ego, pushing yourself too hard, stress, perfectionism, fear of making a mistake, over confidence, being too comfortable

External: group pressure, group expectations

Fear or 'imposter syndrome' or similar – feeling of not being able/good enough

Anger, frustration or other stress

Favoritism or thoughts that skew the thinking to cater only to part of the group

Trying to impress the group or 'fit in' with the group ('being cool')

Tiredness or physical exhaustion

Dunning-Krueger effect – sense of being better than they are or feeling something is familiar and hence not recognising the risks and pushing to continue on a path that may not be safe

External

Being faced with high risks/danger which causes high stress

Being in surroundings and conditions that exceed technical skill level

Group not being active followers can negatively impact decision making or implementation of the decisions

Tiredness or physical exhaustion

Hierarchy/pressure put on the leader by another individual – worry about retaliation or consequences or even thinking they know better

Internal- doubting one's self, fear of getting the decision wrong, fear of looking incompetent, fear of not knowing/understanding. External- new terrain, others in the area, weather, time of day.

Group pressure to finish the initial goal although some factors speak against it

Wanting to prove themselves

Customer satisfaction

Tracks from other people can make a trail seem safer than it is

Other people easily managing the trail can make a leader assume it is easy or safe

The leaders abilities and knowledge of the terrain can let them make false assumptions about the difficulty for the clients

Internal factors I have observed that exert negative influence include pride, personal goals, selfishness, and comfort levels. The last one I will mention that I mean the conflict between personal and professional, in that something a leader feels personally comfortable with may be different than professional standards, organizational expectations, or may not be right for the group.

External factors include knowledge of the environment or ability to observe and gauge the environment, and that could be the knowledge possessed by either the leader or the group collectively. I mean by this also that the environment is an external factor, but the critical element with environment is the leader's ability to interpret observations. It is an external factor because misinterpreting cues can lead to negative consequences or missed opportunities. Another big external factor is organizational culture. Does the organization permit leaders to 'be human' and make mistakes they can learn from? Do people in the organization, including peers and colleagues, pressure leaders to take unnecessary risks out of bravado? Finally, the group dynamic is an external factor

Internal: level of fatigue, general physical/emotional wellbeing, trust (in self, in group, awareness of environment/hazards (unconscious incompetence), communication ability

External: Environmental hazards, proximity to care. Both could be positive or negative influences depending on the situation. For example, proximity to care. A leader could decide to commit to an objectively riskier travel route because they have the ability to evac if an injury occurs, whereas if care is not immediately available the leader chooses a different route.

Internal distractions, be it conflict in a relationship, an injury, or someone's favorite sports team doing poorly, simply take leaders' attention away from their surroundings which makes it harder to make well informed decisions. Objective hazards that initiate a stress response in someone's nervous system such as thunder, rockfall, or high winds, do the same of taking someone's attention away from the minutia of an outdoor environment and may make it easy to miss more relevant, but quieter hazards.

When leaders are disengaged from the situation at hand and cannot put aside the rest of the world for the moment you are in it can get dangerous for the group. And if the leader tries to please people too much and listens to the group against their own judgement, that can get dangerous as well. If a leader encounters conditions that are new to them, their fear or just uncertainty can cause them to become wishy-washy and people will lose confidence in their leader if they keep changing their mind.

I think that the common heuristic traps are the primary influences to decision making. With many leaders' ego and social pressure also is a major contributing factor. However, I also believe that organizational factors are also a huge leading cause to this. If a leader has the pressure of an organization to not spend money leading them to not replacing essential gear/equipment,

or organizational pressure to not leave the field due to staffing issues, then leaders will often make a decision that is informed by those factors. Thus, not replacing the crampons that are no longer functioning as well as they should or not leaving the field when they are experiencing emotional distress that affects their decision making.

Inclement weather can distract leaders' from thinking clearly. Fear or anxiety of the instructor can negate what they feel are options for the decision. Risk tolerance of the individual can influence whether or not a conservative decision is made

Group influence (external)

Unfamiliar Terrain/Bad weather (external)

Time Crunch (external)

Ego - what people think of me (internal)

Fear of consequences (internal)

I think that ego is huge. Like I want to do something, so Imma put my stoods in challenging situations just bc I wanna do something. The cool factor and wanting to prove that I am a good instructor, good outdoor education. Over confidence when accompanied with inexperience. When experienced, unfamiliar external factors can be adapted when things go wrong. When inexperienced you can't adept external factors when things go wrong because you have nothing to drew on.

Thoughts and feelings – Acceptance

Surroundings – familiarity with surroundings

Internal: Try to please the group, instead of leading

External: The group

Feeling unsafe with your co-instructors or group dynamics. Nottrusting the people that you are with can negatively influence a leader's decision making. Not feeling supported or not having resources outside of the trip you are leading. Time pressure and not feeling like there is enough time to make the correct decision can lead to rushing through the process.

Internal: Ego, fear of failing, fear of losing social status, tiredness, stereotypes and learned patterns of self (such as "my role as the male, my role as the female, my role with my skin color..), hunger, feeling discomfort,

External: The environment: Cold, wet, steepness, hazards, wind, waves, fog, snowstorm... the weather. Peer/group pressure, social pressure, socioeconomic and gender related stereotypes

3.) Which one of these Heuristic traps do you feel outdoor leaders fall into most commonly when making decisions?

Answers

A cycle I've watched is lead's familiarity, someone who is rinsing and repeating a trip, becomes complacent, meanwhile that person can exude an expert halo which another leader might fall victim to, and follow along with via acceptance.

Familiarity is a major trap that outdoor leaders fall most commonly when making decisions. It's the same reason why many seasoned alpinists surprisingly succumb in their easier adventures. Familiarity breeds complacency, which deprioritizes risk awareness.

Commitment

Likely the first 3. While participants are likely to follow due to the last 3. Having said this, all 6 should be considered to be possible and something outdoor leaders can fall for. The first 3 also depend on the individual with the desire to fit in possibly being more common (and from my work experience) among younger outdoor leaders.

While 3 is perhaps more common for outdoor leaders working with experienced groups or with peers and #1 being the highest risk across outdoor leaders.

All very individual where certain individuals may more easily fall for specific ones of the above 6 depending on their personality, experience, age, own hobbies, experiences etc.

Familiarity, commitment, expert halo.

Familiarity

For me I feel the most pressure from commitment. When I make plans, I am flexible and recognize that things change. However, I often also feel committed to achieve something I set out to do. When I have made a particular route plan for an expedition, I get excited to achieve it or see it play out as I envisioned. However, things like environment, people or equipment may have created a situation where achieving the original vision is not realistic. Sometimes I will push miles and conditions that I would be comfortable with personally, but that others in the group may not, and I think being committed to big personal goals plays a role in that push.

Familiarity, acceptance, and scarcity. At least, for me! If I've been in an area a lot I notice I have to put in a lot more conscious effort to stay aware, and not just fall back on what I know/have seen previously. I think acceptance can be a big factor in trainings, or when working with others that you'd like to make a good (competent) impression on. I might not make as conservative of decisions when I want to "prove" myself or send what I think is the right message. A lot of this has to do with my reading of others' perceptions of me (which are really just what I think of myself, projected onto them). Scarcity can come into play when things like challenging itineraries, good weather, and capable students align and you find yourself in the ideal scenario—well, we never get this chance, so we have to do this thing that we've wanted to for a long time. Or, if you have two out of the three and you try for it anyway. This one can feel especially tough over the course of a long season or career.

Outdoor leaders often work in teams of two or more, so I think expert halo is the most common heuristic. Especially in a professional setting, where dynamics of power and experience are

implemented formally and result in different wages, it is too easy for instructors with less experience, but rarely less common sense, to overlook something they see as a hazard because the “leader” isn’t concerned.

I think that the most common traps are Acceptance and Commitment. As leaders, we are constantly monitoring and engaging with the energy of the group. It is very difficult to do something unpopular when your primary job (after safety) is making sure people have a good time. To that end, you might agree to something because people want to do it even though you know it is a bad idea. I always have a hard time going back on a plan that I’ve made. Once we make a decision to do something, I want to see it through, no matter how the conditions are changing. But the mark of a great leader is sometimes just knowing when to turn around. When to quit before someone gets hurt. I think that most leaders fall into acceptance traps and familiarity traps commonly.

Acceptance traps - This is because new leaders see themselves in those around them and desperately want to fit into the mold and to belong. This is a natural developmental need for humans, and also leads to leaders doing things that are outside of their comfort zone and often ability because it is what their peers are doing. Familiarity - This is because they have been taught something and that worked in the scenario in which they learned it but then apply it in scenarios where some factors have changed, weather, hazards, group, etc. They feel familiar with the terrain or the management style but are not considering the other factors due to complacency.

Familiarity feels really relevant to me lately. I think because outdoor leaders are consistently in these environments, potentially even have the same itinerary or trip they’ve done 3 or more times now they feel like they know all the risks.

I think it depends on the stage of development the leader is in. I think that familiarity is probably the most common for more experienced leaders. Probably Acceptance for newer leaders.

I think that Tracks are HUGE. Tracks like yeah homie did this, I got beta so it’s fine. Familiarity. And Expert Halo. Again if you have a wealth of experience as an outdoor leader, a professional in the sport you are leading, then you are much less likely to fall into these traps, mainly tracks, commitment and expectance. Expert halo and acceptance don’t really apply if you are professionally employed. Scarcity may catch a leader out if they have a personality that is excitable and have high achievement desire.

Familiarity

I think it is totally dependent on the situation, but the heuristic trap that I’ve most commonly seen is expert halo, especially when working in a leadership team.

In the Nordic outdoor culture, acceptance. Generally speaking, people lack the skills to understand and express emotions, and therefore are easily impacted by emotions and feelings.

4.) What are the 2 most important strengths in your decision making as an outdoor leader?

Answers

Checking my gut instinct against someone else and talking through my thought processes and concerns before committing to a route. Being conservative. Maybe, yes maybe, if a group was super dialed, they'd be fine in a slightly risky situation. But if I don't know that ahead of time, I'm not likely to chance a slightly riskier situation just to see. Would rather be safe than sorry.

I tend to follow risk management models while making any decisions that may have some potential severity. I also tend to collaborate more in areas or scenarios that I've encountered multiple times in the past. For example, I let my colleagues lead the safety check and do risk management assessment even if it's their first time there and it's my 5th. Due to the cultural background that doesn't put as much emphasis on culmination of an adventure through summit or some grand ending, instead puts it in the experience and relationships, I tend to keep my summit fever in check which helps me to not put my groups and myself in risky situations even if it is projected as the culmination and the highlight of the adventure. Logical reasoning and emotional intelligence. Situational awareness – surrounding, group, self. Risk awareness, mitigation and management skills. Willingness to listen to others input and feedback and willingness to back off.

Group assessment

Terrain assessment

For me this is similar to the first question. I feel like I collaborate well with my co-instructors and the group that I am leading to gain perspective or share my vision and be humble enough for ask others to critique and refine my ideas. To offer something additional, I think ownership is another important strength for me. When I make decisions, I commit and take full ownership of all outcomes. This stems from a military leadership model I learned in which leaders may delegate the authority to do something to others, but they remain ultimately responsible and expect to be held accountable. Ownership to me also embodies some of the other factors I mentioned like being humble and showing humility.

When I make decisions as part of my job working in the outdoor industry, I feel that I am a good observer of where my people are at. What is an appropriate level of challenge? I think that I am a good communicator, and I try to come to decisions together with my co-instructor(s) as much as I can. I try to weigh risks/hazard and make conservative decisions.

I think I make decisions slowly in a professional setting, which allows me time to observe carefully, and carefully weigh pros and cons. I also do identify with having a more logical mind, which allows me to identify cause and effect scenarios which are potentially hazardous.

I think that over the years, I've grown in self-confidence as a leader. I trust myself to

make the decisions that I know will benefit the group. I have a lot of experience and I trust both my experience and my instincts. I don't let anyone questioning my decisions cause me to doubt myself. I can honestly consider their suggestion and choose what I think will be best for the group. I think that the other most important strength is empathy. It was born of people-pleasing so I have to be careful, but I can pretty easily monitor peoples' mood and know how far is too far to push people. I can sense what makes people excited and when they are engaged and adjust my plan and focus based off those things. I have to truly engage with the emotions of my group to get the best trip.

Diverse educational opportunities, learning lots of different ways of doing things and being a humble student always. I think that the way that this is done most effectively is through examinations and certification programs. An objective assessment of skills that allows you to learn from your mistakes by someone that is un-biased.

My leadership style is an analyst architect, so I am always looking for more information before fully forming my thoughts and opinions. This allows me to gain more perspective and thoughts before deciding. My intuition, listening to that gut feeling of this doesn't feel right is really valuable. It is not hard and fast logical data but a feeling that is usually right. I take it with a grain of salt sometimes but it does have a heavy weight in most of my decision making.

Awareness - being aware allows me to anticipate problems before they arise

Adaptability - allows me to deploy different tools in different situations, and quickly change what I am doing if something is not working

I think that I am pretty good at identifying risks and challenges, especially when it comes to looking at the needs and how the group is doing and working together. I also think that I am pretty good at centering students and the student experience (what is the value of this and questioning why we do this)

Experience and expertise.

Knowledge/information – of the skills necessary for the task (ability to assess ability level of the students and utilize appropriate tasks and terrain)

Ability to assess safety of terrain, due to weather influences etc. (keeping informed with changes in weather/terrain, which could affect the tasks)

As an Outdoor Educator I was highly trained and competent on technical skills, and developed a high understanding of the balance in between risk taking and learning environment. Another strength that I gained through teaching, was accepting that I am also always learning and to assume responsibility for my own actions.

Confidence

Using all available resources

Anticipating the need for decision making based on experience of leading diverse groups in several different environments and cultures, but also ability to stop the action if needed and communicate need for more information

Humility - always safety first