

THESIS

**Creating a Handbook for Shift Supervisors of
KiipeilyAreena**

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ABSTRACT

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While working as a shift supervisor in KiipeilyAreena, I noticed a need for written guidelines for the shift supervisors to monitor the safety of the climbing gym. As a result, I decided to create a handbook for the shift supervisors to deepen their knowledge of climbing safety and to build their confidence when having to intervene in difficult situations.

In this thesis, I investigate the reasons why some climbing accidents happen by applying different theories to subjective hazards in climbing. To gain knowledgebase for the handbook I applied knowledge from adventure education along with legal guidelines about risk management and safety of indoor climbing. Additionally, I looked into the psychological and psychosocial safety of the customers and employees.

I used quantitative research methods to measure the effectiveness of the handbook, as I surveyed the employees before and after introducing the handbook. The first survey allowed me to gather information on the current knowledge base and the levels of confidence of the shift supervisors along with ideas about what the handbook could contain. The second survey results revealed positive outcomes of the effectiveness and value of the handbook along with the feedback from my commissioner.

Keywords: Climbing, Safety, Risk Management, Adventure Education, Shift supervisor

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1 INTRODUCTION

Over the past years, climbing has been booming in popularity as more people are finding the joy of moving their bodies in unconventional ways to ascent a wall and problem-solve along the way. As new people are getting into the sport, they must be aware of and follow the safety rules of a climbing gym accordingly. In Kiipeilyareena, this is the job of the shift supervisors to instruct and supervise customers to ensure overall safety in the gym. Through my observations, I have noticed a need for clear guidelines for the shift supervisors to supervise in a coherent and organized manner.

According to my research, there are no public records of how to supervise a climbing gym safety while having a lot of varying information e.g., what is and is not a safe way to belay a climber. The purpose of this thesis is to improve the safety of a climbing gym by focusing on educating the shift supervisors of KiipeilyAreena.

1.1 Commissioner

KiipeilyAreena is a climbing gym complex that internationally goes by the name of Moments Climbing. KiipeilyAreena was first founded in 2010 and ever since it has been rapidly growing as the company intends to become the world leader in the development and operations of commercial climbing gyms. Within the past five years, KiipeilyAreena has opened five new gyms and to this day KiipeilyAreena owns six different climbing gyms. In Finland, KiipeilyAreena has four gyms within the capital region. From oldest to newest the Finnish KiipeilyAreena gyms are called Salmisaari, Kalasatama, Tammisto, and Ristikko. Two of these gyms are just for bouldering, Kalasatama and Tammisto, and the other two, Ristikko and Salmisaari offer rope climbing and bouldering. In the United States, KiipeilyAreena has two bouldering gyms, Iron City Boulders in Pittsburgh, and Blue Swan Boulders in Orlando. The newest addition to KiipeilyAreena is Ristikko, which I will be focusing my thesis on. Ristikko opened in December 2021 in Helsinki and is currently the biggest climbing gym in northern Europe.

1.2 Development needs

Safety is the number one priority of a climbing gym and therefore in Ristikko, two shift supervisors per day are responsible for safety. Through my observations, I noticed a need for clear guidelines for the shift supervisors regarding what they should be looking out for and

what situations they need to intervene in. All the shift supervisors have undergone a practical training period once they first started working as shift supervisors, but a lack of written rules could affect the quality of the training. Furthermore, human memory is unreliable as we are not robots, therefore repetition is key to safety. I have also noticed that some unwritten rules would be useful to know as a shift supervisor but is not common knowledge to all.

1.3 Focus group

The focus group is consisting of the shift supervisors of KiipeilyAreena Ristikko. As of now, there are five shift supervisors in Ristikko including me. Therefore, the focus group will be four people in total. Two of these people started working as shift supervisors in December 2022, one in August 2022, and one in September 2022. The main tasks of the shift supervisors are to go around the climbing gym keep an eye on the safety of the gym, help when accidents occur and organize and check belaying tests when customers want to part take in one.

1.4 Handbook

To meet the need of my commissioner, I created an eighteen-page long handbook for the shift supervisors, which consisted of eight main chapters and five sub-chapters. The handbook included knowledge about instructing customers, inspecting ropes and harnesses, listing different belay devices and how to use them, examples of different climbing knots, how to monitor the safety in different areas of the gym, and the psychological and social safety of the customers and employees. The handbook is written in Finnish, due to the need of my commissioner. In this thesis, I will have a more in-depth look into the topics from my handbook. The cover and contents pages of the handbook can be found in the appendix.

2 KNOWLEDGE BASE

In this chapter, I will go through basic climbing terminology for a better understanding of the thesis and explore the different factors on why climbing accidents happen, with a focus on subjective hazards. As a shift supervisor and a climber, I believe that it is important to recognize the different driving factors behind one's motivation, the mental shortcuts that can affect one's decision-making process, and how a lack of competence or ignorance can lead to errors in judgment.

2.1 Indoor climbing

Indoor climbing gyms use artificial holds to create climbing routes with varying difficulty levels. KiipeilyAreena Ristikko (in the following text shortened to Ristikko), offers four different ways of climbing: bouldering, climbing with auto-belays (including speed climbing), top rope climbing, and lead climbing. I will go through briefly what each term means.

Bouldering indoors means the act of climbing short walls that are around five meters tall or less. Only climbing shoes are needed for bouldering and preferably chalk. There is a large, cushioned mat underneath the walls to jump off or fall onto. (Hörst 2012, 5). In KiipeilyAreena different routes are established by a color grading scale where grey is the easiest and white is the hardest route (apart from a white route that is marked as a joker, meaning it can be any grade between 6a-7a). Routes can be also downclimbed to avoid jumping off and the walls in Ristikko have designated handles for making the downclimb easier.

Auto-belays are devices that automatically belay the climber without the need for a climbing partner. The auto-belay machines are located at the top of each climbing section (one section normally contains three climbing routes), with a safety cable running from the machine to near the base of the route. At the end of the cable, there is a locking mechanism, where the customer can attach themselves. (Hörst 2012, 6-7). In Ristikko the locking mechanism is different from the commonly known auto-locking carabiner, as the auto-belays have a newer, more foolproof locking mechanism. Auto-belay walls in Ristikko are from eleven meters to thirteen meters tall. A climbing harness and climbing shoes are needed for climbing with auto-belays. For beginners and climbers new to Ristikko, a short introduction is given by the staff on how to use the auto-belays. After the introduction, customers should be able to use the auto-belays independently.

In Ristikko there are two auto-belay routes for speed climbing, which are separated from the normal auto-belay area and located in the rope climbing area. Speed climbing is the act of climbing an established speed climbing route as fast as you can. The speed climbing auto-belay locking mechanism differentiates from the other auto-belays, as it has an auto-locking carabiner as the attachment point.

Toprope climbing means climbing routes that already have a fixed rope on the top of the route, running through an anchor. Both ends of the rope are hanging at the base of the route; One end for the belayer and another end for the climber. (Hörst 2012, 6) Two people are needed for this activity and at least one of them (the belayer) needs to have undergone a course or a test to attain a toprope belay card. Before the climb, the climbers need to do a partner check (checking that the harnesses and belay device are on correctly and that the climber's knot is done right). As the climber is climbing the belayer is taking in the rope through their belay device. In toprope climbing, the rope remains relatively tight, which results in shorter falls. Once the climber reaches the top and is ready, the belayer lowers the climber down. In Ristikko there are multiple fixed toprope routes however, customers who have a lead climbing card are allowed to set up a toprope on a lead route using their rope.

Lead climbing is the next step up from toprope climbing as it requires more physical and mental strength (Arasola & Koski 2014, 87). Both the climber and the belayer need to have a lead belay card. In lead climbing, the climbers have the same equipment as in toprope climbing and a rope on top of that. At the start of a climb, the rope is on the ground, tied to the climber, and fixed to the belay device, which is attached to the belayer, and a partner check is to be done. As the climber is climbing up, they clip the rope to quickdraws that are already fixed to the wall. The belayer observes the climber and gives more rope as the climber goes up and takes in the rope when it is needed (e.g., at the start of the route, if the climber wants to rest or the climber finishes the route). Unlike the snug toprope belay, the falls are bigger in lead climbing.

2.2 Heuristic traps

In this and the following sub-chapters, I want to investigate why climbing accidents happen. It is important to understand the underlying factors that lead to an accident as it is vital knowledge in accident prevention. According to the accident reports in KiipeilyAreena, the main

cause of most accidents is human error, which is why I will explore the reasons behind subjective hazards.

I will investigate heuristic traps which are commonly related to avalanche safety, but I believe the same principles could be applied to climbing safety. Heuristic traps are cognitive biases that guide our decision-making process in everyday life. When people want to make decisions quickly and easily, they use these mental shortcuts or “rules of thumb”, which can sometimes lead to errors in judgment. The heuristic traps include familiarity, acceptance, consistency, expert halo, social facilitation, and scarcity. (McCammon 2004). I will demonstrate how four of these traps, expert halo, familiarity, social facilitation, and acceptance could be related to why certain climbing accidents happen.

Expert halo is an effect where one group member becomes the perceived expert, either based on experience, (climbing) skill, dominance, or old age. It could be that the loudest and most confident person becomes the perceived leader, even if he lacks the experience or knowledge that other group members might have. In this heuristic trap, it is common for the other group members to stop contributing to the decision-making process, withhold voicing their concerns, and abstain from questioning the perceived leaders’ decisions as they assume that they are experienced and know better. (McCammon 2004).

Next, I will explain an event from my past in which I believe the expert halo heuristic resulted in an accident that could have been fatal if luck had not been on our side.

I was climbing outdoors with a couple of friends, in a location where it is common to belay the climber from above when top roping. Belaying from above is different from normal belaying, as the belayer must set up a belay station to do it safely. When lowering the climber from above with an ATC it is important to use a prusik as a backup in case of accidentally losing control of the rope.

My friend had set up a belay station and was ready to lower another friend down, but I noticed that he had forgotten to set up his prusik and reminded him of it. A person (belayer) next to us was rolling his eyes while saying “Some climbers use a prusik and some don’t”, perhaps implying that “real” climbers don’t use a prusik as he proceeds to lower a climber from the top of the route without using a prusik. As the climber steps over the edge, she free falls approximately twenty meters while the belayer tries to grab onto the rope but ends up letting go each time as the rope is moving so fast that it burns his hands. By some unknown miracle, the ATC

gets jammed, stops the free fall, and the climber does not fall to the ground. Both the climber and the belayer suffered from minor injuries such as burns (belayer) and possibly an injured foot (climber), but probably the psychological damage was much greater.

In this scenario, I hypothesized that the climber did not question the belayers' decision of not using a prusik as she perceived him as an expert and trusted his decision-making process. From the interaction that we had with the belayer, he seemed very confident in himself, even to the extent of skipping common safety protocols. Based on these assumptions, this accident would be an example of an expert halo.

Familiarity is a heuristic trap where a familiar setting causes a person to skip the planning process and act in the same way as in the past. In this trap, people tend to expect the same outcome from a familiar setting and make decisions based on past experiences while disregarding factors that could add to the risk. (McCammon 2004, 3). Some factors that could affect the outcome are for example changes in weather conditions (e.g., humidity, wind, temperature), a person's current energy or fitness levels, or changes in nature (e.g., the climbing route has changed due to erosion or rock fall).

On Vimeo, there was a video of a man free soloing (climbing without any safety equipment) a route that he had climbed and free-soloed multiple times before. In this video, he wants to show off his free soloing skills to his friends and is boasting about his previous achievements. Once he attempts to free solo the route, his foot ends up slipping in the middle of the route resulting in a ground fall. Despite the fact of how horrific the fall looks, the climber survives and only seems to suffer from minor injuries, as he walks off the scene unfazed. The video has been made private and is no longer available to wider audiences, so this story can be considered an anecdote.

In this accident, the familiarity trap played a role as the route was very familiar to the climber and he had climbed and free-soloed the route before. This might have created the illusion that he does not need to use a rope and a harness since he has succeeded without them in the past.

The social facilitation heuristic enhances or reduces the risk-taking behavior of a person when surrounded by other people. The behavior change depends on how confident the person is in their risk-taking skills. People with more confidence in their risk-taking skills tend to take more risks in the presence of other people and people with less confidence in their skills will tend to take less risk around others. (Ian McCammon 2004, 5). In the previous story, social

facilitation could have also played a role as his friends were filming and interviewing him which perhaps resulted in the climber feeling more confident in taking more risks.

The acceptance heuristic is the need to feel validation from the people we like or respect through engaging in activities that we think would get us noticed. This heuristic is common in mixed-gender groups as it often manifests in men engaging in more risky activities, especially during their teenage or early adult years. In the presence of the opposite sex, men tend to behave more aggressively, become more competitive, or enhance their risk-taking behavior. (McCammon 2004, 4). In the next sub-chapter, I will introduce a theory that is related to the acceptance heuristic.

2.3 Risk and recognition

Langseth and Salvesen explore the relationship between risk and recognition in climbing and argue that climbers are more prone to risk-taking behavior due to the influence of the climbing culture. In the article, the authors question climbers' statements about their motivation being internal and them not being interested in status or risk-taking behavior. The authors claim that climbers have been socialized to internalize beliefs from the climbing culture, and because of this, their internal motivation is external. To put it simply, climbers learn a set of values when entering the climbing community which can guide their behavior toward risk-taking to gain credibility. (Langseth & Salvesen 2018).

This can be seen when new people start the sport, as they will quickly learn the hierarchy in the climbing culture where leading a route is seen as more valid and gives more credibility as opposed to top roping the same route; The riskier act holds more value. Although if the competencies are low while the risk is high, it does not give credibility to the climber, as it is seen as foolhardy. (Langseth & Salvesen 2018). Below you can see the cred-zone model (cred short for credibility) by Langseth and Salvesen, where the authors explain the relationship between different levels of competence and risk concerning what gives the individual credibility, what is seen as foolhardy, or which act goes unnoticed.

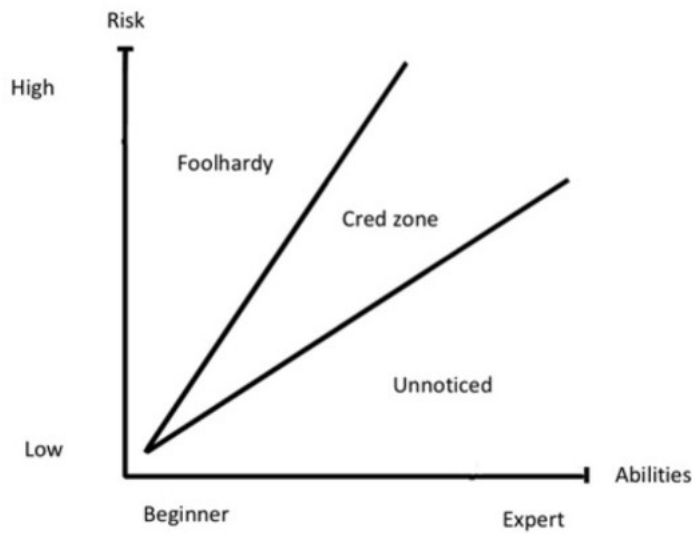


Figure 1. Cred-zone model (Langseth & Salvesen 2018)

Although I do agree with Langseth and Salvesen that the climbing community influences the individual climber, I would also state that risk and uncertainty are a part of the adventure and the motivation behind adventure can be internal such as personal growth. The cred-zone model is comparable to the adventure experience paradigm, where the cred zone is comparable to the peak adventure since the competence and risk match in both zones. Based on these models one could say that the climb that gives the most credibility is the one with maximal performance. Martin and Priest suggest that when competence and risk are matched personal growth is likely to occur (Martin & Priest 1986).

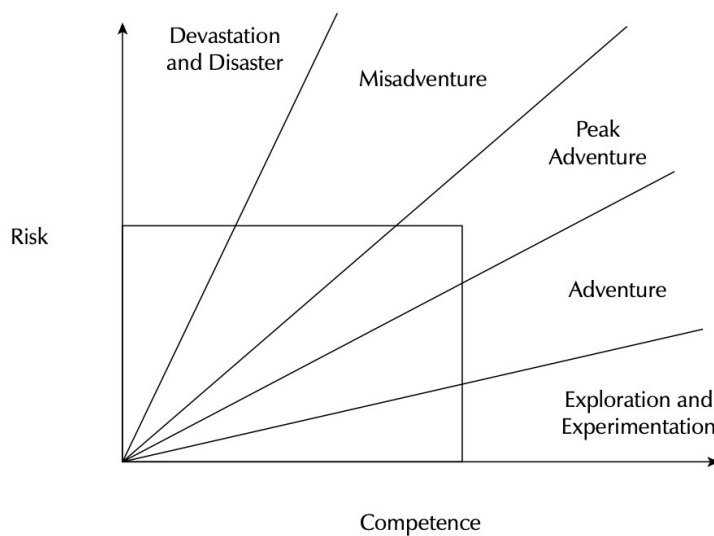


Figure 2. Adventure experience paradigm (Martin & Priest 1986)

In both models when the risk outweighs the competencies the results are undesirable. The foolhardy and the devastation and disaster zones are unlikely to have advantages, as they can damage the credibility of the climber and cause physiological and/or psychological damage. The misadventure zone is partly in the foolhardy zone and partly in the cred-zone, which also complements the theory of the adventure experience paradigm where misadventure can either have positive or negative outcomes.

2.4 Dunning-Kruger effect

Looking further into the reasons behind climbing accidents, the Dunning-Kruger effect could play a role in this. The Dunning-Kruger effect is a metacognitive bias where a person overestimates their expertise, intelligence, or skills due to ignorance of the topic (Dunning&Kruger 1999). In this effect an inexperienced person tries to achieve something that is out of their reach, for example, climbing Mount Everest without any prior training or mountaineering knowledge. This person might believe they are competent to climb Mount Everest because they have gone hiking before. This effect can be related to commonly unfavorable personality traits such as arrogance and overconfidence, but also misinformation or lack of knowledge can cause a person to have this bias.

The Dunning-Kruger effect may exist in climbing, particularly recently as the number of people starting the sport has been increasing steadily. Most if not all the shift supervisors have seen at least one example of a person belaying who does not have the competencies to belay. While working I have seen many cases, where a person belays in an unsafe way, for example, keeps letting go of the rope. In these cases, the belayer is solely relying on the autolocking mechanism of their belay device even though it is not the intended way to use the belay device. Sometimes the person does not even have an autolocking belay device but might believe that the device would work despite them not holding on to the rope. Letting go of the rope when belaying is extremely dangerous as it can in the worst-case scenario be fatal due to a ground fall of the climber. Every so often when customers have been confronted about this by an employee, they admit that they did not know they were belaying in an unsafe way. In rare cases, the customer disregards the employee's directive and keeps repeating the same mistakes or starts to argue with the employee unwilling to admit that they were wrong. Some of these cases happen because the customer who is inexperienced in climbing gets a quick lesson from their friend on how to belay, which is not allowed in Ristikko.

Gripped magazine posted an article about two climbers drilling dangerous bolts into a climbing route on Yamnuska. Merrick Montemurro reported about the incident on social media referring to the climbers being inexperienced. What made the climbers appear to be inexperienced is that they used homemade quickdraws (climbing safety equipment used to clip the rope onto), wore bicycle helmets, and seemingly lacked overall climbing knowledge. The climbers added eight bolts to the route that were dangerously under-drilled, before giving up on the route. Later, the dangerous bolts were removed by two climbers, Nick Baggaley, and Greg Barrett. (Gripped 2021). The incident on Yamnuska is an example of the Dunning-Kruger effect, where two inexperienced climbers attempt to climb and bolt a route without the proper knowledge or equipment.

Although the Dunning-Kruger effect has faced a lot of criticism, due to the research methods and their interpretation of the data, I believe that the effects' intended lesson holds value. "The effect is about us, not them...The lesson of the effect was always about how we should be humble and cautious about ourselves." Dunning comments in an article written by Jonathan Jarry (Jarry 2020).

As I climber I need to be aware of my competencies, to know what skills I am lacking and how I can learn new skills. When learning technical skills in climbing such as belaying, making anchors, or multi-pitch climbing it is important to attend a course held by a professional, rather than trying to learn these skills through watching a five-minute Youtube video. Online resources for technical skills in climbing vary a lot in quality and might have contradictory information. For example, the official way of belaying being taught in Germany is considered an unsafe practice in Finland.

3 INDOOR CLIMBING SAFETY

Climbing is an inherently dangerous sport as it can in the worst-case lead to a serious injury or death. The risks of climbing can be minimized but never eliminated. Climbing accidents can happen to anyone, despite a person's skill level or knowledge base. The information in this thesis should not be depended on solely when learning about indoor climbing safety. This thesis is meant to educate people with preexisting knowledge and experience about climbing safety yet there is a potential for outdated or incorrect information.

Indoor climbing injury risks are lower compared to the risks of rock climbing but as stated before, (indoor) climbing is never risk-free. Most indoor climbing accidents can be avoided through a decrease in individual mistakes. (Hoffmann & Schöffl & Küpper 2013). In the last chapter, I focused on the possible reasons behind subjective hazards but in this chapter, I will focus on risk management with the intent of minimizing risks as a shift supervisor in KiipeilyAreena Ristikko.

3.1 TUKES – Finnish safety and chemical agency

TUKES is the Finnish safety and chemical agency that monitors the safety and reliability of consumer services, products, and industrial activities. According to the consumer safety act (kuluttajaturvallisuuslaki 920/2011), consumer services cannot cause danger or harm to customers. This law applies to all services that require a fee to participate. The consumer safety act does not include clubs and non-profit organizations unless they are offering services to non-members, in which case they must follow this law. However, to operate responsibly all clubs and non-profit organizations offering services to their members should follow the TUKES guidelines. TUKES has written obligations to ensure the safety of customers in indoor climbing gyms. Some of these TUKES safety instructions are referenced below.

Rope climbing:

- Make sure of the competence of new customers by giving them a test unless the customer has a card as proof of a completed course.
- Instruct and monitor the use of self-belaying climbing equipment; a course or a test is not required for using them.

(TUKES)

Both rules are stated in sub-chapters 3.3 First Contact with a Customer and 3.5 Auto-belay Safety.

Bouldering:

- Instruct the customers in different falling techniques.
- Use instructions and signs to warn people about situations, in which a climber could fall on another climber.

(TUKES)

Bouldering safety is talked about in sub-chapter 3.4.

Good safety practices:

- Monitor the access to the climbing area and check the skills of the new customers.
- Make sure that the instructions and rules concerning climbing are clear and monitor actively that the rules are followed.
- Make sure that the supervisors have sufficient know-how about climbing, so that they can intervene in activities that are clearly dangerous.
- Make sure that the structures, tools and equipment are strong, durable, and in good condition with regular maintenance and inspections. Maintenance records help you to stay up-to-date with equipment repairs and maintenance.
- Make sure that there are no structures or equipment in the fall zone, on which falling climbers could hurt themselves.
- Make sure that the personnel are prepared for emergencies in case of an accident occurring on the climbing wall.

(TUKES)

The handbook was created to develop the knowledge of many of the practices stated above. More information can be found in the following sub-chapters.

TUKES requires the service provider to identify and assess the risks of their services. This includes creating a safety document, a risk analysis, a risk management plan, and an accident

report document. The documents should be kept up to date. The safety documents are a tool for the service provider, not written for the authorities unless TUKES specifically requests it. The paperwork does not guarantee safe practices but can help in the process of planning and improving safety. Thus, the service provider should have sufficient training, experience, and knowledge to run their operations safely. Serious accidents, near-misses, and deaths should be reported to TUKES. (Turvallisuus- ja kemikaalivirasto 2015, 10-15).

3.2 Risk management

Priest & Gas defines risk management as “procedures put in place to reduce the likelihood of an accident or incident”. There are three types of risk management procedures, proactive/primary (before), active/secondary (during), and reactive/tertiary (after). In a climbing gym setting proactive risk management procedure would be equipment inspection, the active risk management procedure would be helping an injured customer and the reactive risk management procedure would be filling in an accident report. (Priest & Gas, 2017, 30.)

Risk management is an ongoing process where prevention is key, which requires proper prior planning. Imagination and knowledge about the dynamics of the activity and environment, allow the leader to make a thorough risk analysis (Hogdson & Bailie, 2012, 47). In KiipeilyAreena the proactive risk management procedures consist of safety documents (e.g., risk analysis and risk management and safety plan), training employees, first-aid courses, gear inspection, instructing beginners, and a safety video for new customers.

As the customer starts to climb, it is the job of the shift supervisor to check that the customer is doing it safely and using the intended equipment in the right way. The shift supervisor goes around the gym checking the customers’ equipment, belaying cards, belaying habits, climbing habits, how they use the auto-belays, do they consider other people in the gym, and helping injured customers (active risk management).

Each gym collects data on each accident and incident, which is part of the reactive risk management procedures. When an accident occurs, the shift supervisors fill in an accident form, where they answer questions about the accident, analyze the severity and pinpoint the location and the climbing route where it happened. This data is being examined by the managers of each gym, and if needed, can be discussed in meetings with the employees. Each accident is being examined whether it was the fault of the customer or the climbing gym.

3.3 First contact with a customer

As the customer walks in, it is important to identify the type of customer and their needs. Is the customer new to climbing? Have they registered and watched the safety videos? Is the customer going top rope or lead climbing? Do they have a lead- or a top rope card or need to do a test? Does the customer have own equipment? Is the customer going to use the auto-belays? Do they know how the auto-belays work in Ristikko? Is the customer going bouldering? Does the customer know how to safely boulder? Are the parents who are bringing in their kids to climb going to stay there and supervise their kids? Are the kids coming by themselves old enough to be left unsupervised?

As it is dreadful to ask an endless number of questions from each customer, this requires a bit of analyzing to get a feel for what kind of a customer they are (beginner vs. lead climber). Small details give out surprisingly a lot of information about the customer, such as clothing, a harness in hand, and/or climbing shoes hanging from the backpack. These details can help the employee to guide the questions in the right direction and allow them to skip irrelevant questions.

To improve safety, each new customer is required to register and watch a safety video before they start climbing. The safety video includes an introduction to auto-belays and bouldering along with some general rules.

3.4 Bouldering safety

Based on the accident reports of KiipeilyAreena, most accidents happen while bouldering. To minimize the bouldering risks, new customers must watch a safety video when registering where they are given tips on how to fall safely and information about the general rules of bouldering. If needed, additional instructions and demonstration of falling will be given to the customer by the staff.

When supervising the bouldering area, it is important to pay attention that customers are not climbing with a harness on and that children under the age of fourteen are being supervised by an adult. Other details to pay attention to are that people are not climbing on routes that are crisscrossing and that people or items (e.g., chalk buckets, water bottles) are not under a climber. Regularly people like to lay on the bouldering mats when taking a break, but if in doubt, it is good to check that they are not injured or unconscious.

3.5 Auto-belay safety

Auto-belays are checked daily for any wear and tear or dysfunction of the machine. A more thorough inspection is done once a week and maintenance of the machines are done once a year. The auto-belays in Ristikko have a thick mattress underneath, which intends to save a life in case of a fatal mistake (e.g., climbing without attaching the harness to the auto-belay). The mat prevents severe injuries or death when falling from up to 16,5 meters of height. (Climbmat.com)

Every customer who has not used auto-belays in Ristikko before needs to be instructed on how to use them correctly. The instructions vary based on if the customer has used auto-belays before in another gym, versus if the customer has never used auto-belays before.

When instructing a customer to use an auto-belay, firstly it is important to check that the customer has appropriate clothing, has emptied their pockets, is not wearing jewelry (especially rings and watches), and has a proper fitting climbing harness and climbing shoes on. The harness needs to be checked that it is worn the right way (the waist belt is not too low or loose, the leg loops are the right way around and tightened and the harness is the right size). After the mentioned risk factors are checked and corrected, an introduction will be given on how the auto-belays work, followed up by a demonstration of how the locking mechanism works. Customers are encouraged to perform a fall test, after briefing them on how to do it safely. After the fall test, customers are told about the grading system, while mentioning it is also allowed to use all holds within the same section. Lastly, related safety rules are mentioned such as, “Be aware of not standing under another climber” and “Stay on your section when climbing”.

When supervising the auto-belay area, key things to look out for are that customers are wearing the harnesses correctly, have the appropriate gear (climbing shoes instead of sneakers, harnesses that are not dangerously worn out or too old, empty pockets and no rings) and are using the auto-belays in the intended way. Also, many of the rules which are stated in the last chapter apply to auto-belays as well, such as children under the age of fourteen must be under adult supervision, no one or nothing can be under a climber, and injured or unconscious customers must be helped.

3.6 Toprope- and lead climbing safety

The toprope- and lead climbing area need frequent attention when supervising the gym, as the risks can be must greater if the safety protocols are ignored.

All customers who are belaying must have a toprope- or a lead belay card which has been granted in Finland. The belay card is part of a unified national system created by Suomen Urheilukiipeily Ry, which aims to guarantee safety in indoor climbing. (Suomen Urheilukiipeily) Customers should have their belay card visible, normally hanging from their harness, so that it is visible to the employees.

Many of the same rules apply as in auto-belay safety, such as, the harness should be worn correctly, the safety equipment (harness, rope, belay device, and carabiner) should be in good condition and used in an indented way, and that climbers are not climbing too close to each other, on or routes that are crisscrossing.

When supervising the rope climbing area, the most attention needs to be paid to the belayers. Belayers must have their focus on the climber and the act of belaying. Before starting the climb, the belayer must have the carabiner gate locked and attached correctly, and the belay device should be attached to the rope accordingly. The belayer should not stand too far away from the wall or give too much slack, especially when the lead climber has not yet clipped the first five quickdraws. Before the first five quickdraws have been clipped, the belayer should stand next to the wall, but not directly under the climber. The rope should not have extra slack, but rather the slack should be given as the climber needs it. After the first five quickdraws have been clipped, the belayer can take a few steps away from the wall and have a moderate amount of slack in the system, so that the rope hangs in the shape of a banana. The belayer must always hold the rope when the climber is on the wall. The hand which is holding the rope should be in a fist position so that the fingers and thumb are around the rope and the grip should be firm. In addition, the hand holding on the rope should be mostly kept under the belay device. If the belayer is over twenty percent lighter than the climber, the belayer should attach themselves to a weight bag or use a device to reduce the weight difference for example OHM. (Arasola & Koski 2014, 83).

The climber must have their eight-knot done correctly, with an extra ten centimeters or more of rope end left after the knot. The climber must clip all the quickdraws along their route and

try to avoid back-clipping or z-clipping. The climber should be aware of other climbers next to them.

Another factor to look out for is that the customers are not teaching belaying to their friends who do not possess a belay card. It is recommended that all customers who are interested in rope climbing should go through a belaying course if they do not have the skills for belaying yet. Customers who are already familiar with belaying but do not possess a Finnish belaying card should prove their skills through a belaying test.

If the climber or belayer is not following the safety protocols, the employees must intervene. The intervention should be done in a calm and collected manner so that the employee does not escalate the situation further. The employee should pay attention to their body language and the choice of words. Good posture, open body language, eye contact and clear instructions and commands, are great leadership tools for creating credibility.

In non-urgent situations, where there is no real risk, the employee can wait until the climber is down before instructing the customer. An example of a non-urgent situation would be when the belayers Grigri (a belay device) is clipped the wrong way around to the carabiner but is otherwise used correctly. In this situation, the employee can politely point out to the customer about the belay device being the wrong way around and instruct them on how to fix it if the customer is clueless.

In urgent situations, where there is a risk of an accident, the employee should intervene immediately. An example of an urgent situation would be when the belayer's brake hand is not on the rope while the climber is on the wall. In this situation, the employee should react by quickly grabbing the brake side of the rope and using short and clear commands, such as "Hold the rope!".

In extreme situations where the customer keeps endangering themselves or others, the employee can ban the customer from belaying on that day. An example of an extreme situation would be when the customer is incapable of belaying or ignores the employees' instructions and continues using poor belaying techniques. In these situations, the customer might start to argue but it is important for the employee not to get provoked and to stay collected.

3.7 Climbing rope inspection

The climbing rope is the “lifeline” of the climber as it plays an essential part in climbing safety. The rope should be stored and used appropriately and inspected regularly. An old or damaged rope should be retired. (Arasola & Koski 2014, 56-67).

The lifespan of a rope is hard to determine as it varies between manufacturers, amount, and type of usage, cleanliness, how it has been stored, and the amount, and intensity of falls taken with it. Manufacturers estimate a lifespan of ten years if the rope has not been used and has been stored in optimal conditions. If the rope is used on regular basis, the lifespan can be as short as one to two years. The rope should be stored in a dry, cool, and dark space away from sun rays and chemicals. (Arsola & Koski 2015, 64-65).

When inspecting a climbing rope, it is important to go through the entire rope centimeter by centimeter from one end to the other, looking out for any abnormalities. The key is to use vision, and touch, to get an idea of the state of the rope. A common way to do this is by taking the rope from one end and start bending it while slowly moving the bend toward the other end of the rope. During this process, it is important to feel and observe each part of the rope. The shape of the bend should look like an alien head if the rope is not damaged, and if it is damaged, the rope will fold completely together. Other signs of damage to look out for while going through the rope include extreme fuzziness, exposed core, cut marks, flat or swollen spots, or tufted strands. (DiMartino 2009). If any of these signs of damage appear in the rope, retire the rope, or cut it with a rope cutter and burn the ends neatly if the remaining (undamaged end) of the rope is long enough to climb with. In Ristikko the cut rope end must be colored with a black rope marker, indicating that the rope has been cut and is still long enough for the climbing routes. New measurements of the rope and the date when the rope was cut need to be documented on the bottom of the rope bucket (in Ristikko).

3.8 Climbing harness inspection

Along with the climbing rope, the climbing harness has an essential role in climbing safety. Therefore, the harness should be well taken care of and inspected regularly. The harness should be retired if it is damaged or too old. (Arasola & Koski 2014, 43)

It is hard to define an exact lifespan for a climbing harness as it varies between manufacturers, amount, and type of usage, how it has been stored and the amount, and intensity of falls taken

with it (Arasola & Koski 2014, 43). That is why it is important to inspect the harness regularly. According to Petzl the lifespan of a Petzl harness is a maximum of ten years from the date of manufacture if the harness has not been used and has been stored appropriately (Petzl 2018). For appropriate storage solutions, the harness should be stored in a dry, dark, and warm space away from sun rays and chemicals (Arasola & Koski 2014, 43). For harnesses that have been used, manufacturers estimate a five to seven years of life span depending on the brand. However, people who climb actively might renew their harnesses every two to three years (Arasola & Koski 2014, 43).

The inspection of a climbing harness is a similar process to the inspection of a climbing rope as the harness is thoroughly examined for any abnormalities or wear and tear. The important parts to focus on are the waist and leg loops, belay loop, tie-in points, stitching, buckles, and hems. The signs of damage include wear, tear, cuts, swelling, deformation, and corrosion (in the metal parts) (Petzl 2018). The age of the harness can be determined by looking at the label on the inside of the waist loop, which states the year when the harness was made. Manufacturers' guidelines should be followed when determining the lifespan of the harness. The harness which does not pass the examination must be purposefully destroyed by cutting it open before discarding it. This is done to avoid anyone finding the harness in the garbage can and using it for climbing purposes in the future. Furthermore, destroying the harness helps with the recycling process, as the different materials of the harness should be separated and sorted accordingly to minimize the environmental impact.

4 PSYCHOLOGICAL AND PSYCHOSOCIAL SAFETY

4.1 Psychological and psychosocial safety of the customers

In adventure education, psychological and psychosocial safety are important parts of safety that need to be acknowledged when planning a program. While for some, trusting an auto-belay to catch their fall might be a fun exercise, for others it might be an anxiety-ridden experience. Fear of the unknown can cause psychological stress or fear that leads to nervousness, negative emotions, and regression (Lehtonen & Saaranen-Kauppinen 2020, 249). Instructors must recognize when a customer is way out of their comfort zone, so they can guide the customer in a way that prevents them from venturing into a panic zone. People should be acknowledged as individuals with varying levels of competence and perceptions of acceptable risk. (Berry & Hodgson 2011, 12)

A safe learning environment is an essential part of psychological and psychosocial safety. A safe learning environment helps to optimize the learning process, while an unsafe learning environment can have the opposite effect and cause the learner to forget the learned information or shift their focus on survival and protection to avoid humiliation (Clapper 2010, 2-5). A safe learning environment should be stress-free, voluntary, encouraging, accepting, and positive. To establish a safe learning environment, it is important to allow the learner to make mistakes, use active strategies, be patient, encourage the learner to engage, build trust, and reflect. A reflection is an important tool to figure out if the information was understood by the learner and to avoid groupthink (a situation where learners are afraid to ask questions for the fear of being embarrassed). (Clapper 2010, 2).

A great tool for instructing is the step-by-step approach, where the customer is set to achieve, which helps the customer to focus, learn and enjoy the process. This requires the instructor's ability to put themselves into the shoes of the customer and notice the small details in the customers' behavior and body language. (Lehtonen & Saaranen-Kauppinen 2020, 250).

When instructing a beginner to use an auto-belay, it is important to give clear instructions at a steady speed, without rushing them through. It is crucial to make sure that the customer understands the instructions and can demonstrate how to use the auto-belays correctly. The beginners are encouraged but never forced to attempt the fall test. The ways to encourage a customer is to focus on positive talk to build confidence ("You can do this!"), instruct them to focus on their breathing ("Take deep steady breaths") and to relax the tension from their body

(Hörst 2012, 107-121). In the end, it is important to create a safe environment for reflection where the customer can ask any questions they have in mind and to make sure that the instructions were clear. Additionally, customers are encouraged to contact the staff in case of confusion, concerns, or follow-up questions that they might think of later.

4.2 Psychological and psychosocial safety of the employees

The workers must be in working condition to stay alert and act in stressful situations such as accidents. Therefore, the employees' psychological and psychosocial safety should be taken into consideration. The employer needs to recognize the workplace psychological or psychosocial workload causes, prioritize which of these are affecting the employees negatively, and discover solutions to eliminate or reduce the main stressors. After the improvements have taken place, the effect on well-being needs to be analyzed. (Työsuojelu). The employees also need to take responsibility to recognize and report the stressors if they are being overwhelmed by them.

In Finland, the occupational safety and health act is made to protect the employees' safety at work, which also covers the mental safety of the employee. The occupational safety and health act demands that employers look after the employees' health and safety in the workplace, recognize the occupational hazards and stressors, consider the employees' physical and mental qualifications when planning the work, and avoid and minimize the workload stressors. (Työturvallisuuslaki 738/2002, 8 §, 10 §, 13 §, 25 §).

The psychosocial workload stressors include the content and arrangement of work and the functionality of the work community. Examples of the content of the work stressors include repetitive work, an obligation for continuous vigilance, unreasonable responsibility, and continuous interruptions. The arrangement of work stressors contains too little or too much work, unreasonable time pressure, and unclear goals, responsibilities, or division of work. Lastly, a few of the stressors of the functionality of the work community include working alone, harassment or other inappropriate behavior, and unfair or discriminating treatment. (Työsuojelu).

Työsuojelu's website offers surveys that help with recognizing the workload stressors, but the employer can also gather information through employee well-being surveys, occupational safety and health inspection, and development discussions. Ongoing anonymous surveys con-

cerning the employees' well-being are recommended for identifying the workload stressors and monitoring the effectiveness of the measures taken. (Työsuojelu).

5 RESEARCH METHODS

I used quantitative research methods to collect data. Altogether I conducted two surveys, one before introducing the handbook to the shift supervisors and the second survey after the introduction. I made the surveys anonymous to prevent the risk of responders feeling uncomfortable revealing their possible insecurities or lack of knowledge.

5.1 First survey results

Before creating the handbook, I surveyed the shift supervisors of Ristikko. In the first survey, I focused on collecting information on the current knowledge, the confidence level of their knowledge, insecurities, and what they would like to learn from the handbook. I included fourteen matrix questions and four open-ended questions. Possibly I went a bit overboard with the number of questions, but I will focus on the most important ones. Four out of four shift supervisors answered my first survey.

3. I feel confident trusting my own judgement when it comes to inspecting the climbing equipment	0,0%	0,0%	0,0%	0,0%	25,0%	0,0%	75,0%	6,5	7,0
4. I feel confident correcting mistakes that the customers are making	0,0%	0,0%	0,0%	0,0%	25,0%	25,0%	50,0%	6,3	6,5

Figure 3. First survey results

I noticed a slight lack of confidence in inspecting the equipment (one person) and correcting the customers mistakes.

10. I feel that my first aid training was enough for me to know how to react in an emergency	0,0%	0,0%	0,0%	50,0%	25,0%	25,0%	0,0%	4,8	4,5
12. I know how to react if a severe acci-	0,0%	25,0%	0,0%	25,0%	0,0%	25,0%	25,0%	4,8	5,0

dent happens (e.g., someone falling to the ground from over 5m)									
13. I know when I need to call an ambu- lance for a customer	0,0%	0,0%	0,0%	0,0%	25,0%	25,0%	50,0%	6,3	6,5
14. I know what to do if an auto- belay stops working while a customer is climbing (e.g., the device is not taking in the slack)	25,0%	0,0%	0,0%	25,0%	25,0%	25,0%	0,0%	4,0	4,5

Figure 4. First survey results

According to the answers, there seems to be a concerning lack of sufficient first aid training and readiness and confidence in one's ability to react in an emergency.

The open-ended questions included "I feel insecure about...", "I would like to learn more about..." and "I think the handbook should include...". The answers revealed the need for a guide to different kinds of belay devices and the correct way to use them. Other topics that were requested included: how to deal with difficult customers, rescuing a climber off the wall, and first-aid knowledge.

5.2 Second survey results

According to my original plan, I was supposed to conduct the second survey only to the shift supervisors of Ristikko, but some variables made me change my plans. One of the reasons why I changed my plans, was that the rules had changed in Ristikko. As of February 2023, all of the employees can take turns in going around the gym, not just the shift supervisors. Another reason was that two of the shift supervisors were on sick leave at the time, which narrowed down my focus group to two people. In the end, I conducted two different surveys after introducing the handbook, one for the shift supervisors and one for the other employees work-

ing at the register. In the second survey, I focused on getting answers about the usefulness of the handbook and feedback. I included relevant matrix questions, open-ended questions, and multiple-choice questions. At the end of the survey, I included one close-ended question, by having a rating scale from 0-10 to grade the handbook.

Of the shift supervisors, two out of two learned something new from the handbook, found the knowledge useful for their work, and believes that the handbook could be used when training new employees. One of them suggested topics that could be added to the handbook: How to act in common injury situations and in case of a fire alarm going off. The other one sent me a list of spelling and detail corrections. On average, the shift supervisors graded the handbook 8,5 on a scale from zero to ten.

Of the rest of the employees who work at the register, three out of eight responded. Two out of three learned something new from the handbook, and three out of three found the knowledge useful for their work and believes that the handbook could be used when training new employees. On average they graded the handbook 9,3 on a scale from zero to ten.

6 CONCLUSIONS

The goal of the handbook was to have a written version of all the relevant climbing safety knowledge I have acquired so that the shift supervisors would have something to look back to after their training period and hopefully learn something new along the way. Overall, the results seem positive as four out of five employees learned something new from the handbook and five out of five found the information useful for their work. All responders found the handbook useful for training purposes for new employees.

Before making the handbook, I wanted to explore why climbing accidents happen. I investigated subjective hazards, as they seem to be the most common causes of accidents in Risktikko. Unfortunately, subjective hazards are quite impossible to control from the point of view of a shift supervisor. However, bringing awareness to these biases could potentially help climbers to reflect on their risk-taking behavior on an individual level. When making the handbook and this thesis, I applied adventure education knowledge along with official guidelines from TUKES and Työsuojelu.

In the end, I got positive feedback from my commissioner supervisor, and she believes that the handbook could be used for educational and training purposes in KiipeilyAreena. The process of creating the handbook and this thesis was an educational process for me and I started to pay more attention to the details that are involved in the safety of a climbing gym. Therefore, I can certainly say that at least one shift supervisor (me) benefitted from this project.

6.1 Development ideas for KiipeilyAreena and the handbook

The first survey results and the second survey feedback suggested that I should include first-aid knowledge in the handbook. One might ask why I did not include first-aid knowledge even though it was specifically requested. The short answer is that I did not think that I could come up with anything new or better that was not already offered through training or written in KiipeilyAreenas' preexisting documents about first aid. Next, I will elaborate further on the reasons behind my thinking.

Through my observations, I believe that there is not a lack of written or vocal instructions on how to react in an emergency, but rather a lack of a hands-on type of approach to the training. The first-aid training which is provided to the employees of KiipeilyAreena ticks all the boxes

of a traditional first-aid training course, where you learn how to approach an injured person, steps of action, how to give CPR, how to use a defibrillator and how to turn over a non-responsive, breathing patient. On top of that, we had a separate course where we went through different types of possible climbing accidents such as dislocated shoulder or kneecap, and how they could be fixed (this information was meant for wilderness situations, as in a city-setting patients are directed to a hospital).

According to the first survey, the main worry is the severe accidents and readiness to act. As these are the more unknown situations that only a handful of people come by in a lifetime, it is natural to feel insecure about one's knowledge and to know how one would react. I believe these situations could be practiced by creating realistic scenarios by using fake blood, makeup, and other props. This way the employees could get a chance to see how they react in an emergency and practice their readiness. A great example of this kind of training is the wilderness first-aid course by NOLS (NOLS). Examples of situations for KiipeilyAreena could be reacting to a belayer fainting, finding a non-responsive climber laying on the ground bleeding from their head, and having to rescue a climber from the wall.

Even though I believe that more of a hands-on approach could benefit the first-aid knowledge of the employees, it is a great idea to include the common injuries and emergencies (fire alarm going off) with steps of action as one shift supervisor suggested. To my knowledge, this information does not exist in written form and could be used especially when training new employees. Additionally, this information could also act as a reminder for the current employees of what to do in case of a common injury for example a twisted ankle, and what preventive measures can be taken to not escalate the situation further (e.g., offering something which contains sugar if the injured customer starts to look pale). Also, information on how to calm a patient and when an ambulance is needed could be beneficial.

Another development idea I have for KiipeilyAreena is to conduct an annual or biannual anonymous employee well-being survey. While working on this thesis, I have improved my knowledge about psychosocial safety in workplaces and regret that I did not include well-being questions in the surveys I made. However, through my observations and conversations with the employees I have noticed a need for monitoring their well-being. When the wellbeing of the employees is monitored regularly basis it can help to recognize the stressors early on and preventive measures can be arranged. The ongoing process also reveals if the measures taken have had an impact on the well-being.

6.2 Critical review

The research lacks concrete results on whether the handbook had an impact on minimizing accidents in Ristikko. In theory, I could have compared the data of the accident reports in Ristikko before and after introducing the handbook. Personally, I think that the results could have been quite random as many of the accidents are connected to preexisting conditions of the customers such as dislocating a shoulder that has been dislocated before. Overall, I believe that comparing the results would have complicated this project and required more time.

When creating the surveys for the shift supervisors, I assumed that I could compare the data of the matrix questions to see if the handbook had an impact on the confidence and knowledge of the shift supervisors. The reason why I did not end up analyzing and comparing the survey results is that I did not think that they were comparable due to the passing of time and the lack of responders. I conducted the first survey in September 2022 and introduced the handbook and conducted the second survey in March 2023. Within this time the shift supervisors may have gained more experience through working in KiipeilyAreena, which should have been considered when conducting the second survey. Additionally, the fact that only two shift supervisors out of four responded to the second survey would have tainted the comparison of the two survey results.

Lastly, the research results can be affected by relationships, as the shift supervisors and other employees are my friends as well. Because of this, they may be more likely to give more positive feedback as they want me to succeed.

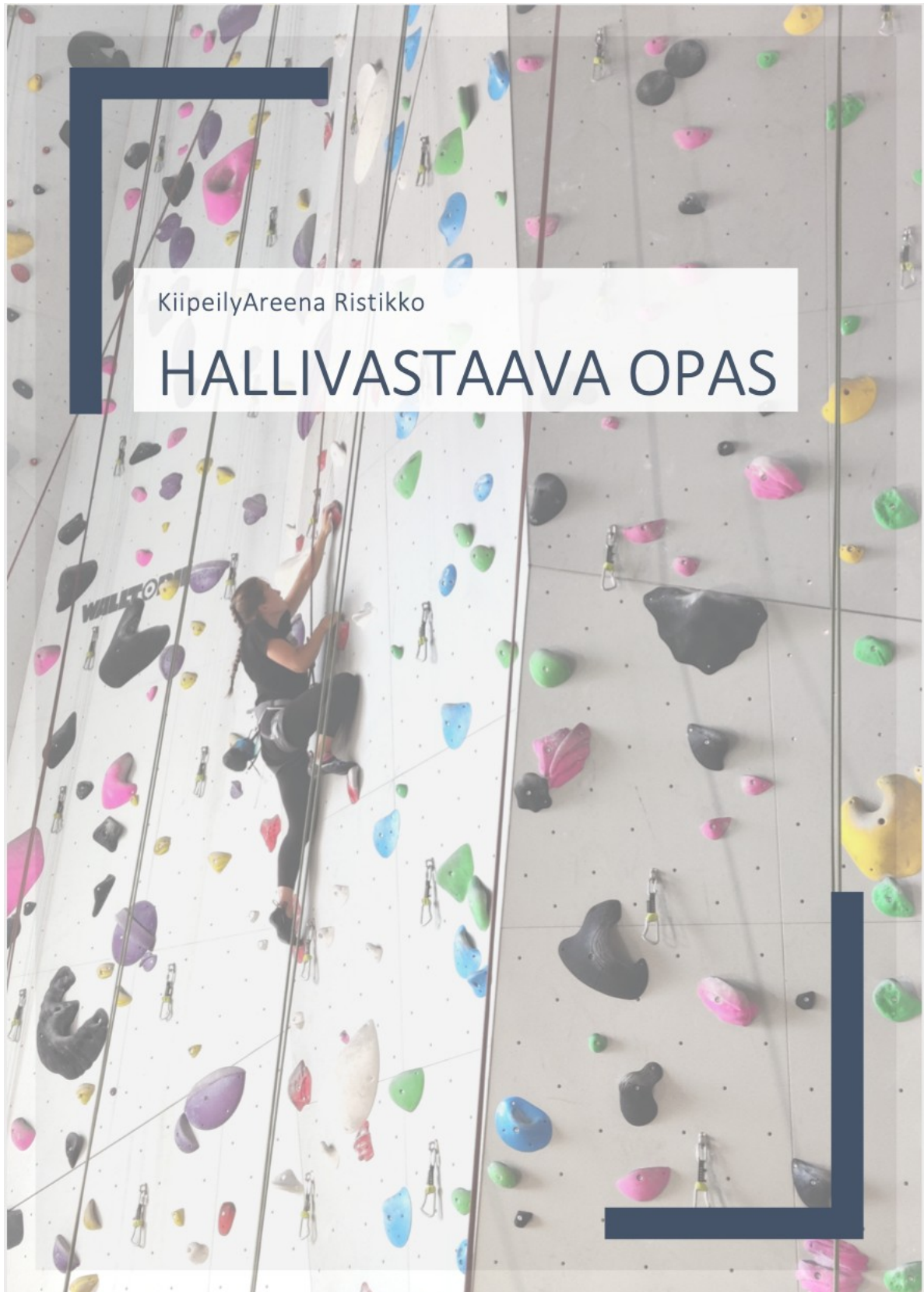
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APPENDICES

Cover page and contents of the handbook:



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First survey for shift managers in KiipeilyAreena:

Vastaajien kokonaismäärä: 4

1. Answer based on how you feel on the scale of 1-7 (1=strongly disagree - 7=strongly agree)

Vastaajien määrä: 4



	1	2	3	4	5	6	7	Keskiarvo	Mediaani
								o	

1. I feel that my training was enough for me to work independently	0,0%	0,0%	25,0%	0,0%	25,0%	25,0%	25,0%	5,3	5,5
2. I feel like I know enough about climbing safety to work as a shift manager	0,0%	0,0%	0,0%	0,0%	0,0%	25,0%	75,0%	6,8	7,0
3. I feel confident trusting my own judgement when it comes to inspecting the climbing equipment (ropes, harnesses, quicklinks, belay devices and carabiners)	0,0%	0,0%	0,0%	0,0%	25,0%	0,0%	75,0%	6,5	7,0
4. I feel confident correcting mistakes that the customers are making	0,0%	0,0%	0,0%	0,0%	25,0%	25,0%	50,0%	6,3	6,5
5. When I am going around the gym, I know what I should pay attention to	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%	100,0%	7,0	7,0
6. I know how to approach customers who are belaying incorrectly (e.g., not holding on to the rope) without escalating the situation	0,0%	0,0%	0,0%	0,0%	0,0%	50,0%	50,0%	6,5	6,5
7. I don't start to doubt my knowledge if a customer begins to argue with me after I correct them	0,0%	0,0%	0,0%	0,0%	25,0%	75,0%	0,0%	5,8	6,0
8. I know what to do if a customer ignores me and	0,0%	0,0%	0,0%	0,0%	0,0%	25,0%	75,0%	6,8	7,0

continues doing something I told them not to									
9. I feel confident removing someone from the lead/toprope climbing area if they continue belaying poorly even after many attempts trying to correct them	0,0%	0,0%	0,0%	0,0%	0,0%	25,0%	75,0%	6,8	7,0
10. I feel that my first aid training was enough for me to know how to react in an emergency	0,0%	0,0%	0,0%	50,0%	25,0%	25,0%	0,0%	4,8	4,5
11. I know how to react when a customer gets a minor injury (sprain, strain, minor bleeding)	0,0%	0,0%	0,0%	0,0%	0,0%	25,0%	75,0%	6,8	7,0
12. I know how to react if a severe accident happens (e.g., someone falling to the ground from over 5m)	0,0%	25,0%	0,0%	25,0%	0,0%	25,0%	25,0%	4,8	5,0
13. I know when I need to call an ambulance for a customer	0,0%	0,0%	0,0%	0,0%	25,0%	25,0%	50,0%	6,3	6,5
14. I know what to do if an auto-belay stops working while a customer is climbing (e.g., the device is not taking in the slack)	25,0%	0,0%	0,0%	25,0%	25,0%	25,0%	0,0%	4,0	4,5

2. 15. I feel insecure about...

Vastaajien määrä: 4

Vastaukset
what to do in severe accidents
...different kind of belaying devices that you dont see often ...if autobelay stops working and i need to help the customer. ...ir customer faints etc while belaying climber and i need to step in
En koe että olen tarpeeksi itse kiivennyr tms että voisin varmasti sanoa näkeväni varusteiden ongelmia (varsinkin pieniä/huomaamattomia). Myös edelleen ohm käyttö on mysteeri vaikka se on monesri kerrottu, en siis välttämättä osaisi aina nähdä jos joku käyttäisi seinällä sitä väärin. Jännittää myös eka kerta kun jollekin sattuu jotain vakavampaa : osaako pysyä viileänä tms
rescuing a climber on the wall

3. 16. I would like to learn more about...

Vastaajien määrä: 4

Vastaukset
EA
facing difficult customer different kind of belaying devices and how to know if customer uses it the wrong way
Varusteet, ensiapuhommat
First-aid stuff and safety practices in rarer occasions

4. 17. I think the handbook should include...

Vastaajien määrä: 2

Vastaukset
Everything :)
Hmm vähän kaikkea esim kuvia varusteista :näin ei näin

5. 18. Extra comments?

Vastaajien määrä: 1

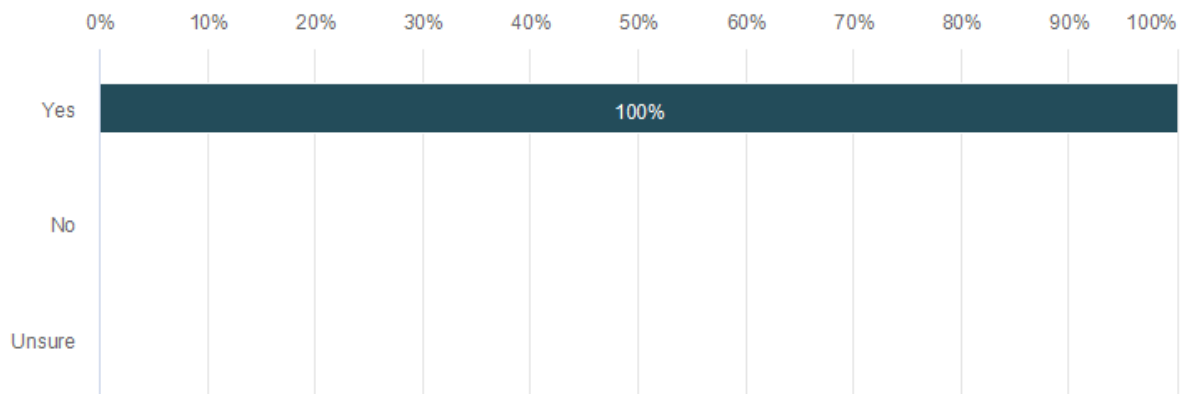
Vastaukset
Go Marianne u can do it!

Second survey for shift supervisors of KiipeilyAreena

Vastaajien kokonaismäärä: 2

1. Did you learn something new from the shift supervisor handbook?

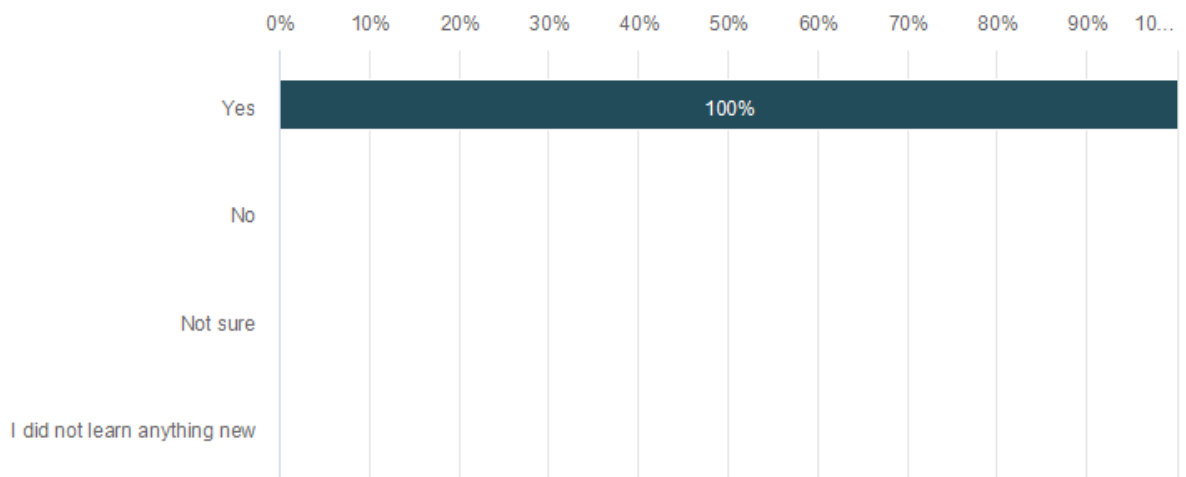
Vastaajien määrä: 2



	n	Prosentti
Yes	2	100,0%
No	0	0,0%
Unsure	0	0,0%

2. Was the knowledge you learned useful for your work?

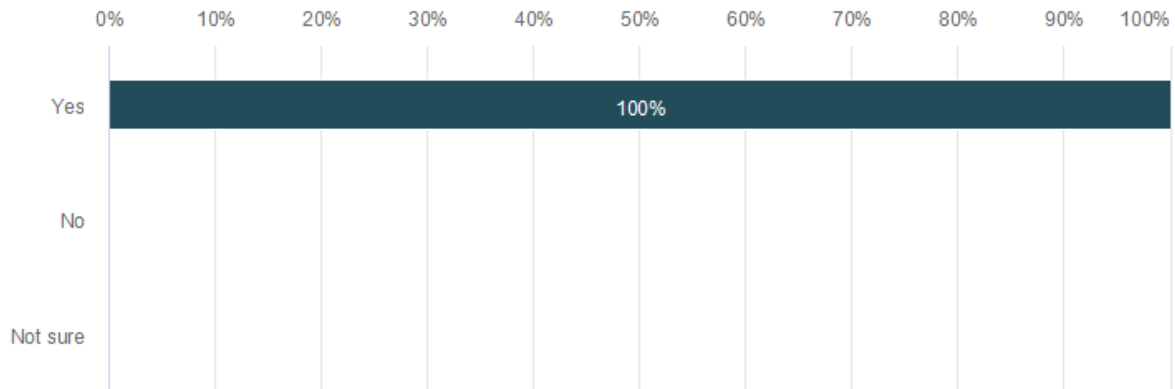
Vastaajien määrä: 2



	n	Prosentti
Yes	2	100,0%
No	0	0,0%
Not sure	0	0,0%
I did not learn anything new	0	0,0%

3. Do you think that the manual could be used when training new employees?

Vastaajien määrä: 2



	n	Prosentti
Yes	2	100,0%
No	0	0,0%
Not sure	0	0,0%

4. Was there something you did not understand? If so, what did you not understand?

Vastaajien määrä: 0

Vastaukset

5. Was there something that you think was irrelevant? If so, what was irrelevant?

Vastaajien määrä: 1

Vastaukset

ei mitään erityistä epäolennaista, mutta tärkeimpiä asioita ehkä voisi korostaa vähän enemmän

6. Was there some information you disagree with? If so, what do you disagree with?

Vastaajien määrä: 0

Vastaukset

7. Was there something you would like to have added to the handbook? If so, what?

Vastaajien määrä: 2

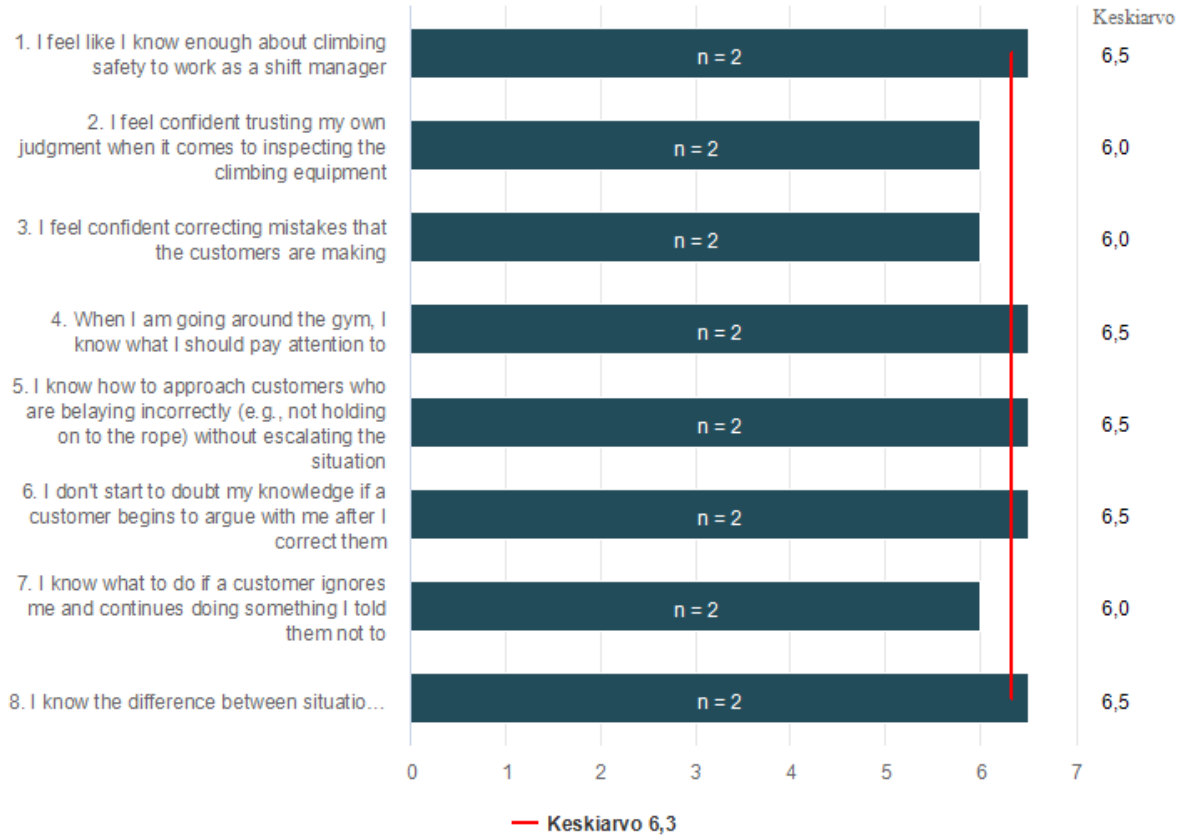
Vastaukset

Listattu jo Mariannelle erikseen.

erityistapahtumissa toimiminen (esim. yleisimmät ei vakavat onnettomuudet, palohälytykset)

8. Answer based on how you feel on a scale of 1-7 (1=strongly disagree - 7=strongly agree)

Vastaajien määrä: 2



	1	2	3	4	5	6	7	Keskiarvo	Mediaani
1. I feel like I know enough about climbing safety to work as a shift manager	0,0%	0,0%	0,0%	0,0%	0,0%	50,0%	50,0%	6,5	6,5
2. I feel confident trusting my own judgment when it comes to inspecting the climbing equipment	0,0%	0,0%	0,0%	0,0%	50,0%	0,0%	50,0%	6,0	6,0
3. I feel confident correcting mistakes that the customers are	0,0%	0,0%	0,0%	0,0%	0,0%	100,0%	0,0%	6,0	6,0

making									
4. When I am going around the gym, I know what I should pay attention to	0,0%	0,0%	0,0%	0,0%	0,0%	50,0%	50,0%	6,5	6,5
5. I know how to approach customers who are belaying incorrectly (e.g., not holding on to the rope) without escalating the situation	0,0%	0,0%	0,0%	0,0%	0,0%	50,0%	50,0%	6,5	6,5
6. I don't start to doubt my knowledge if a customer begins to argue with me after I correct them	0,0%	0,0%	0,0%	0,0%	0,0%	50,0%	50,0%	6,5	6,5
7. I know what to do if a customer ignores me and continues doing something I told them not to	0,0%	0,0%	0,0%	0,0%	50,0%	0,0%	50,0%	6,0	6,0
8. I know the difference between situations that I need to intervene in immediately and situations that can wait until the climber is down	0,0%	0,0%	0,0%	0,0%	0,0%	50,0%	50,0%	6,5	6,5

9. Other comments or feedback?

Vastaajien määrä: 1

Vastaukset
ehkä vähän erottelisin asioita selkeämmin ja korostaisin mikä tärkeintä, nyt aika laajojenkin asioiden informaatio yhtenä massana

10. Grade the handbook from 0-10 (0=very bad - 10=very good)

Vastaajien määrä: 2

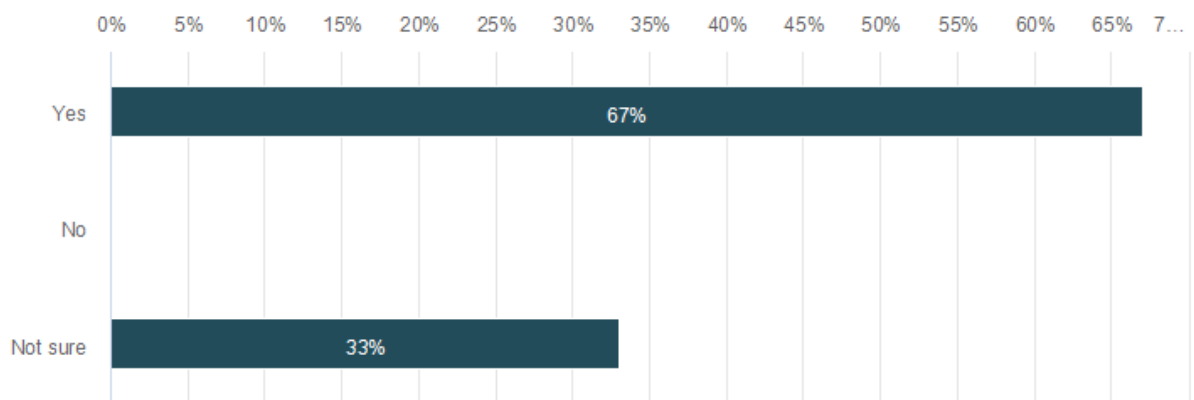
Minimiarvo	Maksimiarvo	Keskiarvo	Mediaani	Summa	Keskihajonta
8,0	9,0	8,5	8,5	17,0	0,7

Survey for other employees of KiipeilyAreena:

Vastaajien kokonaismäärä: 3

1. Did you learn something new from the shift supervisor handbook?

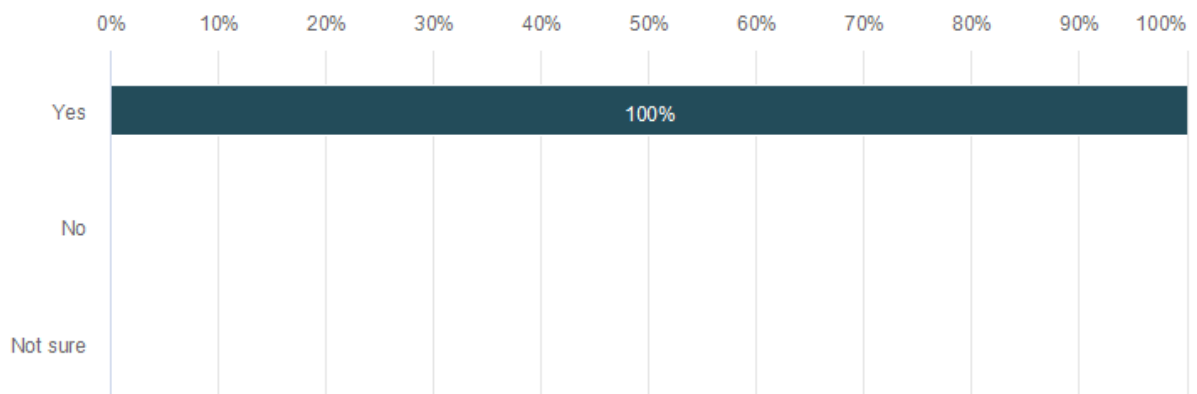
Vastaajien määrä: 3



	n	Prosentti
Yes	2	66,7%
No	0	0,0%
Not sure	1	33,3%

2. Was the knowledge you learned useful for your work?

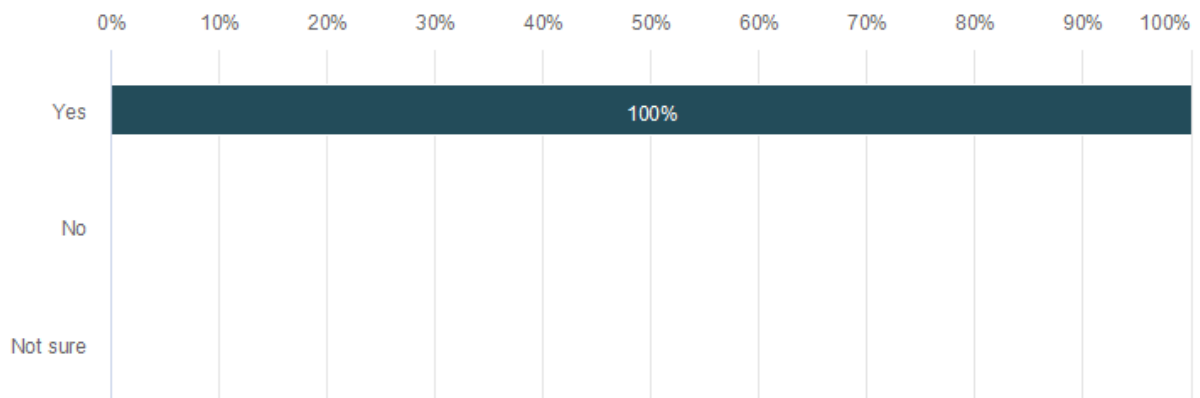
Vastaajien määrä: 3



	n	Prosentti
Yes	3	100,0%
No	0	0,0%
Not sure	0	0,0%

3. Do you think that the manual could be used when training new employees?

Vastaajien määrä: 3



	n	Prosentti
Yes	3	100,0%
No	0	0,0%
Not sure	0	0,0%

4. Was there something you did not understand? If so, what did you not understand?

Vastaajien määrä: 1

Vastaukset
No

5. Was there something that you think was irrelevant? If so, what was irrelevant?

Vastaajien määrä: 1

Vastaukset
No

6. Was there some information you disagree with? If so, what do you disagree with?

Vastaajien määrä: 1

Vastaukset
No

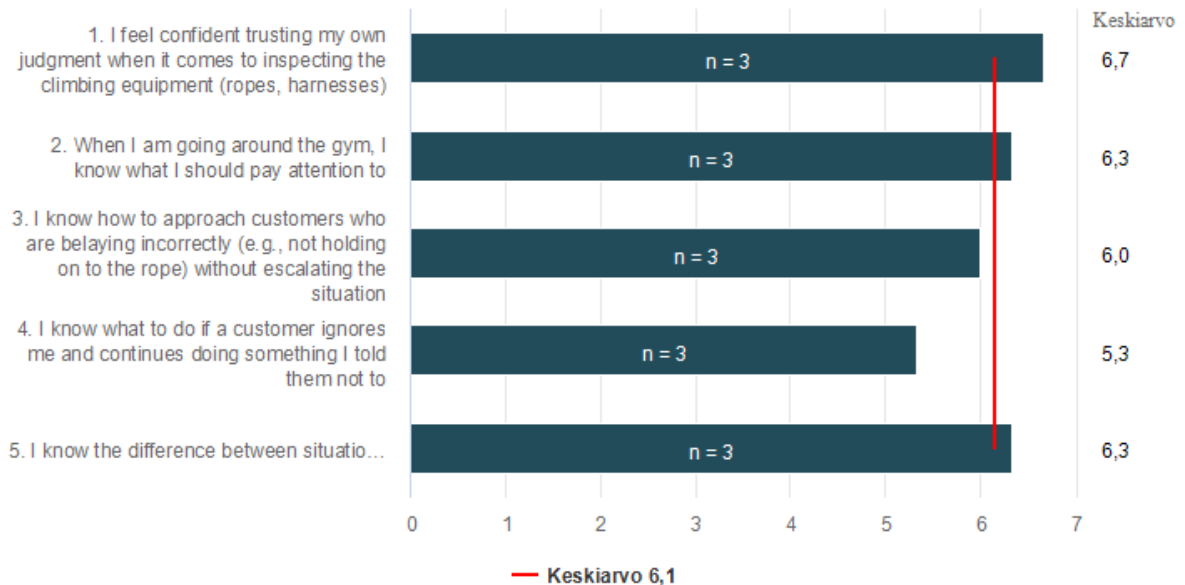
7. Was there something you would like to have added to the handbook? If so, what?

Vastaajien määrä: 1

Vastaukset
No

8. Answer based on how you feel on a scale of 1-7 (1=strongly disagree - 7=strongly agree)

Vastaajien määrä: 3



	1	2	3	4	5	6	7	Keskiarvo	Mediaani
								o	

1. I feel confident trusting my own judgment when it comes to inspecting the climbing equipment (ropes, harnesses)	0,0%	0,0%	0,0%	0,0%	0,0%	33,3%	66,7%	6,7	7,0
2. When I am going around the gym, I know what I should pay attention to	0,0%	0,0%	0,0%	0,0%	0,0%	66,7%	33,3%	6,3	6,0
3. I know how to approach customers who are belaying incorrectly (e.g., not holding on to the rope) without escalating the situation	0,0%	0,0%	0,0%	0,0%	33,4%	33,3%	33,3%	6,0	6,0
4. I know what to do if a customer ignores me and continues doing something I told them not to	0,0%	0,0%	0,0%	0,0%	66,7%	33,3%	0,0%	5,3	5,0
5. I know the difference between situations that I need to intervene in immediately and situations that can wait until the climber is down	0,0%	0,0%	0,0%	0,0%	0,0%	66,7%	33,3%	6,3	6,0

9. Other comments or feedback?

Vastaajien määrä: 1

Vastaukset

Very useful!

10.

Grade the handbook from 0-10 (0=very bad - 10=very good)

Vastaajien määrä: 3

Minimiarvo	Maksimiarvo	Keskiarvo	Mediaani	Summa	Keskihajonta
9,0	10,0	9,3	9,0	28,0	0,6

