

Visitor Risk Perception and Messaging Influence Research

Qualitative Focus Groups

Final Report Prepared for Land Safety Forum *Te Ope Tautiaki*
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BACKGROUND

The Land Safety Forum (LSF) is a land safety sector-wide network, made up of around 15 agencies and organisations (central and local government, and NGOs). It provides a mechanism for agencies and organisations to work together in a coordinated and integrated way to reduce preventable search and rescue (SAR) incidents. The purpose of the Land Safety Forum is to collaborate on complex land safety issues that require networked and systemic solutions.

One of the LSF's key workstreams is data and insights and a stocktake of the sector's research and data identified a need to carry out a second iteration of a Visitor Risk Perception and Messaging Influence study. The surveys for the first report were undertaken over the 2018/19 and 2019/20 summers at seven sites distributed across seven National Parks.

The purpose of the 2024/25 Visitor Risk Perception and Messaging Influence research project is to:

- Gain a current state understanding of visitors' perception of risks at place, and how much risk they think they are exposed to;
- Identify where visitors get their information from, and the influence that information has on visitors' risk-related decision-making; and
- Compare the new findings with those from the original survey and to determine why any changes might exist.

There is also interest in understanding a) what impact the Covid-19 pandemic may have had on visitor risk perception, and b) any changes in the influence of messaging and information sources over time. The study findings should inform subsequent initiatives by the Land Safety Forum and its members aimed at improving safety and reducing search and rescue incidents.

RESEARCH APPROACH

Two approaches are being used to collect the data:

1. **Quantitative Intercept Interviews** will be conducted with participants about to embark on a walk at one of eight selected sites around the motu. Participants will be asked to provide their name and email address for a follow up – post walk – survey. This fieldwork (Data Collection) will be conducted during Summer 2024/25, with final reporting due June 2025.
2. **Supplementary Qualitative Focus Groups**, to address some of the emergent questions raised in the earlier survey, and to provide a more holistic approach to understanding visitor perceptions, information influences, and behavioural dynamics.

This document addresses the second approach and contains the findings from two groups of Outdoor Enthusiasts brought together in Christchurch in July 2024; one group with those who self-assessed themselves as having more experience and one group with those who self-assessed themselves as having less experience, (knowledge, and leadership capabilities) in the outdoors.

Caveat: While this report provides some useful and interesting context and insights, the findings are not statistically robust and need to be interpreted as such. The document includes generalised feedback from just 13 people and may not be representative of the views, experiences, and actions of the wider New Zealand public. Specifically, sometimes participants hypothesised or made assumptions based on their own experiences or what they had heard from others, and which might not be factually correct.

SUMMARY

Participants' risk tolerance greatly affects their choice of outdoor activities and the thoroughness of their planning and risk assessment. Those with a high emphasis on safety engage in more detailed and careful planning, while those more comfortable with risk tend to prioritise excitement and adventure, often with less focus on comprehensive safety measures.

Behavioural Dynamics Among Less Experienced Participants:

- Safety-Oriented Individuals focus heavily on safety and preparedness. They conduct thorough planning and carry essential safety equipment like communication devices and PLBs. This group's planning reflects a low appetite for risk, with a strong emphasis on personal responsibility and adherence to safety guidelines.
- More Relaxed Individuals take a more casual approach to safety and planning. They prefer less structured activities and may not engage in rigorous preparation. While they acknowledge the importance of safety, their planning tends to be less extensive, reflecting a moderate appetite for risk where safety is considered but not prioritised.

Behavioural Dynamics Among More Experienced Participants:

- Higher Risk Appetite Participants seek out adventurous and high-risk activities like backcountry skiing and challenging hikes. Their planning focuses as much on finding exciting routes, emphasising discovery, and adventure as on stringent safety precautions. This approach may involve less detailed risk assessment and preparation, with a focus more on the rewards and excitement of the experience.
- Lower Risk Appetite Participants favour safer, less demanding, or potentially dangerous activities. Their planning is more thorough and cautious, prioritising safety by selecting well-known, low-risk routes and considering factors like weather conditions, terrain difficulty, and safety measures. Their approach aims to minimise risk and ensure personal well-being.

Impact on Planning and Risk Assessment:

- The appetite for safety and risk significantly shapes participants' planning processes. Those prioritising safety invest time in thorough planning, including route selection, weather checks, and emergency preparedness. In contrast, those with a higher risk appetite may streamline planning to prioritise adventure, potentially overlooking some safety aspects.
- Experienced Participants often integrate their knowledge and past experiences into planning, enhancing their ability to anticipate and mitigate risks. Less Experienced Participants might rely more on external guidance and structured planning tools provided by safety organisations.

Factors Influencing Risk Perception and Planning:

- Personal responsibility, experience, and skill level play crucial roles in shaping how participants approach risk assessment and planning.
- Peer influence, available signage, information accessibility, perception of risk, potential consequences, and environmental factors also heavily influence participants' planning and safety strategies.
- Participants with higher risk appetites are more likely to rely on personal experience and group dynamics, whereas those with lower risk appetites are influenced by external information, signage, and a cautious approach to potential hazards.

Role of Safety Organisations and Education:

- Clear and comprehensive signage, education initiatives, and awareness campaigns by organisations like the Mountain Safety Council and Department of Conservation are vital in promoting safety and preparedness among outdoor enthusiasts.
- Providing up-to-date information on trail conditions, weather, and safety guidelines can enhance decision-making and encourage a more proactive approach to risk assessment and planning.

Mitigating Poor Decision Making and Risk Taking:

Participants acknowledge and commend the extensive work done (past and ongoing) to keep people safe in the outdoors. They also recognise their own and others' failings - short memories, carelessness, influence of others, resulting in poor decision making - and the continuing requirement for education and reinforcement of key messaging. Although many individuals know what they should do to stay safe they need reminding to:

- Educate themselves
- Conduct thorough research from verified sources
- (Truthfully) assess their personal capabilities
- Plan ahead
- Carry appropriate safety equipment
- Stay updated on weather and conditions
- Follow signage and guidelines
- Practice situational awareness
- Communicate and share plans
- Learn from experiences

Furthermore, while participants accept they are personally responsible for their own actions, they also believe DOC, MSC and other organisations have a responsibility to support them to make good decisions by:

- Ensuring signage is clear, up-to-date, and easily understandable. This could include more detailed explanations for any restrictions (track closures) or dangers and using internationally recognised symbols or QR codes for additional information.
- Continuing to educate the public about outdoor safety, emphasising personal responsibility, the importance of proper gear, and understanding the difficulty levels of different activities. Like water safety, outdoor education is expected to be ongoing and to communicate, remind, and reinforce key messages to both experienced people and those who are new to the outdoors.
- Producing campaigns and educational materials that emphasise the importance of preparation, risk assessment, and following safety guidelines, highlighting the consequences of reckless behaviour.
- Maintaining real-time data on track conditions, weather, and potential hazards, accessible through websites, apps, and other non-internet-based channels.
- Working with local councils, tramping and other outdoor recreation organisations (mountain biking, trail running, multi-sport, kayaking, skiing, 4WD, for example), schools, environmental and other community groups, to share safety information and promote responsible outdoor practices.
- Developing a clear, standardised rating system to indicate the level of risk associated with different trails or activities e.g., beginner, easy, intermediate, advanced, expert. The current trail grading system alludes to this in the track descriptions, but the symbols / icons do not.
- Engaging with the public, through social media, school, and community events, to answer questions, and provide guidance on safety and risk management.
- Enforcing compliance with safety guidelines and consider implementing penalties for those who disregard rules and risk the life of others.

Other ways to promote safety in the New Zealand outdoors could include:

- Organised group activities led by experienced individuals to 'pay it forward,' to guide, train, and pass on their knowledge to future generations.
- Encouraging individuals to share incidents (near misses) as learning opportunities for future decision-making for themselves and others (potentially sharing their stories and what they should have done differently).
- Promoting continuous assessment and adaptation of plans based on new information, feedback, and evolving conditions.
- Stressing the importance of safety as the top priority, even if it means limiting the level of adventure or enjoyment in outdoor activities. For example, encourage walkers to be adaptable, revert to Plan B, or choose a walk suitable for the least fit, adventurous, or experienced party member.

Conclusion

Participants' perceptions, behaviours, and planning strategies regarding risk assessment and safety in the New Zealand outdoors are diverse, reflecting a spectrum of risk appetites and safety priorities.

Understanding these dynamics is critical for developing effective strategies to enhance safety awareness and reduce risks.

Balancing the thrill of adventure with the need for safety is essential for fostering a responsible and enjoyable outdoor culture in New Zealand, where Government and national safety organisations play a key role in supporting this balance through education, clear communication, and accessible information.

DETAILED FINDINGS

OUTDOOR ACTIVITIES IN NEW ZEALAND

Activities Undertaken in the Outdoors

Participants' activities in the outdoors varied widely, reflecting their interests and levels of experience.

Less Experienced individuals tended to engage in activities such as walking, hiking, tramping, and exploring nature. They often frequented more accessible and familiar locations and various trails around Christchurch and the Canterbury Region. Outdoor activities were a way to enjoy nature, enhance fitness, and take a break from urban life. Some had dabbled in more immersive or risky experiences like camping, hunting, sky diving, and skiing, while others expressed a desire to participate in overnight tramps and hikes in the future. These outdoor pursuits provided a meaningful way to connect with nature and were valued for the sense of adventure and well-being they offer.

In contrast, **More Experienced** outdoor enthusiasts typically engaged in a broader range of activities that included not only walking and hiking but also more specialised pursuits such as surfing, kayaking, diving, spearfishing, fishing, skiing (both resort and backcountry), and hunting. Day walks and overnight tramps or hikes held significant appeal for this group.

Motivations for Participating in the Outdoors

Motivations for participating in outdoor activities were similar for **More and Less Experienced Participants**, though the emphasis and strength of feeling differed in some instances.

Primary motivations included:

- It helped them stay active, improve their physical health, and maintain a healthy lifestyle.
- It provided an opportunity to get out in nature, away from the city, and experience beautiful views.
- They appreciated the chance to explore different landscapes, such as hills, bush, beaches, parks, and mountains.
- It allowed people to explore new areas, discover hidden gems, and go off the beaten path, to feel a sense of adventure and the opportunity to see and experience new things.
- It was a chance to socialise, spend time with others, and be part of a community.
- It facilitated spending quality time together and strengthened family bonds.
- It was a form of stress relief and a way to improve mental wellbeing. Being in nature, engaging in physical activity, and taking a break from daily routines had a positive impact on mental wellbeing.
- Participants appreciated the accessibility and convenience of walking, tramping, or hiking in their local area. In Christchurch, for example, there were a multitude well-maintained tracks, parks, and walking paths, making it easy to engage in these activities.

More Experienced Participants also mentioned the satisfaction of accomplishing a goal or reaching a destination. While they were aware of the potential risks involved, their passion for the outdoors and love of exploration remained undeterred. The outdoors was not just a place for recreation but a space for pushing personal limits and experiencing the thrill of nature.

Self-Assessed Skill Rating

Participants' self-assessed skill ratings were based on personal experiences, past involvement in outdoor activities, and the perceived level of difficulty of the activity (walk).

Less Experienced Participants tended to rate their skill level as None or Beginner (with some Intermediate), though several acknowledged they may be overestimating their skill level and abilities, or that their skills may not align with current guidelines or their own fitness levels. Some admitted to relying on more experienced people when planning or undertaking a trip.

More Experienced Participants tended to rate their skill level as Advanced or Expert, depending on the context. For example, they might claim to have Expert skills for Backcountry Skiing but not for wilderness camping and hiking or, they might be Expert Hunters, but have more limited water based skills. These participants sometimes volunteered or felt pressured to take a leadership role, which could be stressful in groups of mixed (and overestimated) ability. Whilst happy to share their knowledge and experience, they did not always want to be responsible for others and called for an increased sense of personal responsibility among all outdoor enthusiasts.

Components of a Good Experience

The components of a good outdoor experience were mostly consistent between **More and Less Experienced Participants**, typically:

- Being physically fit and prepared for the level of difficulty of the walk.
- Enjoying the beautiful views and being able to get out of the city and into nature.
- Being aware of personal responsibility and taking necessary precautions, such as appropriate clothing and footwear, carrying necessary supplies, and following safety signs and guidelines.
- Having the right equipment.
- Exploring new places and discovering new trails or areas.
- Easy access to walking tracks and trails, and many accessible options.
- Clear and informative signage that provided important information about the track, its difficulty level, and any specific requirements or restrictions.
- The involvement of local communities in maintaining and improving walking tracks and their surrounds.
- Personal motivation for fitness, exploration, or simply enjoying the outdoors.
- Ultimately, having a positive and enjoyable experience while walking, tramping, or hiking.

More Experienced participants also mentioned the importance of learning from and reflecting on past experiences, incidents, or close calls to improve future planning and decision-making.

Components of a Bad Experience

Common components of a bad outdoor experience were:

- **Getting lost:** Taking the wrong path or not following clear directions.
- **Lack of preparation:** Underestimating the difficulty level of a walk and not having appropriate equipment.
- **Poor signage:** Insufficient, unclear, or ignored signage which had led to confusion and poor decision making.
- **Ignoring safety warnings:** Disregarding signs or warnings about unsafe conditions, such as unstable cliffs, narrow paths, steep steps, or dangerous water currents.

- **Overconfidence and overestimating abilities**, leading people to take on walks or hikes that were beyond their capabilities.
- **Lack of awareness of surroundings**: Failing to pay attention to changing weather conditions, potential hazards, or the need for proper equipment.
- **Other people with disregard for the environmental conservation**: Those who ignored rules and regulations and whose actions had a negative impact on others.

More Experienced Participants also mentioned:

- **Injuries** or getting hurt while hiking.
- **More challenging terrain** (than expected).
- **Unpredictable weather conditions**.
- **Crowded or overpopulated trails**, which diminished the sense of solitude and tranquillity.

Mishaps, Accidents and Contributing Factors

For **Less Experienced** individuals, common incidents had included getting lost on trails and getting caught out on dangerous beaches, sea, or river conditions. Contributing factors included a lack of preparedness, inadequate knowledge about risks, overestimating their abilities, and disregarding safety precautions.

For **More Experienced Participants**, mishaps had included sprained ankles while hiking, dislocated shoulders while kayaking, and encountering rogue waves while boating. While these more seasoned adventurers tended to be more aware of the risks, accidents still occurred due to overconfidence, lack of preparedness, and unforeseen environmental challenges.

Lessons Learned (from Mishaps and Accidents)

Participants noted several key lessons from the mishaps, accidents, or problems they had encountered, and which had encouraged some – not all – to take more care and be more prepared in future. Specifically to:

- Choose the right path and follow signage to avoid getting lost or taking the wrong route.
- Be prepared with the necessary equipment, such as proper clothing, shoes, water, and snacks, to ensure safety and comfort during the walk or hike.
- Pay attention to warning signs and adhere to safety guidelines.
- Take personal responsibility for safety, recognising the role of individual decisions in preventing accidents.
- Stay aware of surroundings and potential dangers.
- Communicate plans and inform others about the intended walk or hike.
- Learn basic survival skills, such as building a shelter, or starting a fire.
- Assess personal skill levels and expertise honestly to avoid overestimating abilities.
- Be aware of unique risks and challenges associated with specific locations.

Additional lessons learned by **More Experienced Participants** were to:

- Seek advice from experienced individuals.
- Hike or walk with a group for added safety and support, and ensure the group stayed together.
- Maintain caution and awareness, even with proper preparation.
- Monitor weather conditions closely and understand how they may impact the hike.
- Respect the power of nature and recognise personal limitations.

PERCEPTIONS OF SAFETY AND RISK

Appetite for Risk and Key Drivers

Participants' appetite for risk varied widely, shaped by their experiences, motivations, and perceptions of safety.

Among **Less Experienced Participants**, there was a noticeable divide between those who prioritised caution and those who sought adventure. Some **Less Experienced** individuals took a cautious approach, emphasising the importance of preparation, proper equipment, and awareness of conditions to ensure safety. They stressed the need for careful planning and did not underestimate the risks involved in outdoor activities.

Others in this group were drawn to activities that provided more adrenaline or a sense of adventure, such as skydiving, skiing, and snowboarding. While they enjoyed the thrill of taking risks, they also recognised the importance of assessing their abilities and learning from past risky behaviours to exercise more caution in the future.

Among **More Experienced Participants**, attitudes towards risk ranged from highly risk-averse to those who actively sought extreme adventures. Some preferred low-risk activities and prioritised safety, while others pursued high-risk activities for the thrill and adrenaline. Most participants, however, fell somewhere in between, with varying degrees of comfort with risk-taking.

Experienced individuals were often motivated by a desire for excitement, adventure, and the challenge of pushing their limits. They made decisions about engaging in risky activities based on their personal experience, knowledge of the activity, level of personal control, perceived rewards, and the opinions of others. Factors such as weather conditions, safety measures taken, and the experiences of friends or experts also played a role in their decision-making.

In summary, there were multiple factors which motivated individuals to take risks or engage in risky activities:

Less Experienced Participants were more likely to be driven by a sense of adventure, overestimating their abilities, lack of awareness or knowledge about the risks involved, or peer/social pressure to engage in such behaviours.

More Experienced Participants were more likely to be driven by personal experience, group dynamics, gender differences in risk perception, knowledge and awareness of risks, perceived rewards or benefits, guidance from 'expert' organisations, and individual factors like age and physical condition.

What is the Objective of the Activity – To Take Risks or to Seek Adventure and Stimulation?

One topic raised during the focus groups was whether participants sought to take risks or whether they sought adventure and stimulation. It seemed that the distinction between risk-taking and seeking adventure and stimulation lay primarily in the intent and the level of potential danger or harm involved in the activities.

Risk-taking involved deliberately engaging in activities or situations with a high likelihood of danger or harm, such as extreme sports, skydiving, or rock climbing. This behaviour was motivated by the desire for an adrenaline rush, excitement, or a sense of accomplishment from facing and overcoming fear.

Less Experienced individuals might take risks to test their limits or experience a thrill, while **More Experienced** participants may do so due to their familiarity and confidence in managing potential dangers.

Seeking adventure and stimulation focussed on pursuing new experiences and challenges without necessarily involving high risk or danger. This included activities like walking in unfamiliar terrain, kayaking, or exploring new places, where the emphasis was on excitement, novelty, and personal growth rather than on facing danger. Both **Less and More Experienced** individuals might seek adventure to enjoy new experiences, connect with nature, or challenge themselves in a safer environment.

While both behaviours involved a desire for excitement, the key difference was the level of danger: risk-taking involved a willingness to face potential harm, whereas seeking adventure was about experiencing novelty and growth without courting danger. The choice between these behaviours was influenced by an individual's motivations, their assessment of risks, and their comfort with potential dangers.

Planning an Activity

Participants' risk tolerance and desire for risk and/or adventure and stimulation affected both the types of activities they choose and how they planned and assessed risks. Those prioritising safety tended to engage in detailed planning and preparation, while those more comfortable with risk focussed more on excitement and less on safety precautions.

Less Experienced Participants:

- Safety-Focused Individuals emphasised safety and preparedness in outdoor activities.
 - Engaged in thorough planning and carried necessary safety equipment, such as communication devices and personal locators.
 - May be trained in first response, demonstrating a strong sense of personal responsibility.
 - Reflected a low appetite for risk and prioritised adherence to safety guidelines.
- More Relaxed Individuals displayed a more casual attitude towards safety and risk.
 - Focussed on enjoyable, less structured activities and casual preparation.
 - While aware of the importance of planning, they might take fewer precautions and engage in less rigorous planning.
 - Suggest a moderate appetite for risk, considering safety but not always prioritising it.

More Experienced Participants:

- Those with a Higher Risk Appetite:
 - Preferred adventurous and adrenaline-inducing activities like backcountry skiing, kayaking, or challenging hikes.
 - In planning were focussed on finding exciting and challenging routes, sometimes prioritising thrill, and rewards over potential dangers.
 - Did risk assessments less focused on safety precautions and more on the adventurous elements.

- Those with a Lower Risk Appetite:
 - Favoured safer, less demanding activities.
 - Prioritised safety in planning, selecting routes known to be safer and considering factors such as weather, terrain difficulty, and necessary precautions.
 - Engaged in cautious risk assessments to minimise risks and ensure safety.

Main Factors Influencing Risk Appetite and Planning:

- Personal responsibility, experience, and skill level significantly shaped how participants assessed risks and planned outdoor activities.
- Other influencing factors included peer influence, signage, information availability, perception of risk, potential consequences, and environmental factors.
- Higher risk appetite participants relied more on personal experience and group dynamics.
- Lower risk appetite participants were more influenced by external information, signage, and a cautious approach to potential hazards.

Assessing the Risk of an Activity

When comparing risk assessment and decision-making processes between **More Experienced** and Less Experienced participants, the following differences and tendencies were observed:

More Experienced Participants:

- Engaged in continuous monitoring of environmental factors like weather and avalanche conditions.
- Focussed on the skill level and dynamics of the group, evaluating everyone's abilities to prevent reckless behaviour.
- Planning involved extensive research using detailed information sources, such as local guides, advisories, and trail reviews.
- Prioritised having the proper equipment for the activity, ensuring safety standards are met.
- Experience shaped their self-assessment and influenced their understanding of risks, often utilising past experiences to inform decisions.
- External advice from experts and detailed local knowledge often played a role in shaping their risk perception.

Less Experienced Participants:

- Their risk assessment relied more on basic research like location and weather forecasts.
- They were likely to seek advice from experienced individuals or rely on posted guidelines and signage.
- Preparedness centred around ensuring basic fitness and having essential equipment (e.g., navigation tools, first aid, and emergency communication devices).
- They followed peer behaviour and guidelines more closely, adjusting their understanding of risks based on external influences.
- Their environmental evaluations were more generalised, and they tended to make contingency plans based on more obvious challenges.

Main Differences in Risk Assessment:

- **More Experienced:** More detailed, nuanced understanding of conditions, risks, and personal/group abilities.
- **Less Experienced:** General reliance on fitness and preparedness, with external advice and signage playing a larger role.

Decision Making Pre and During the Activity

More Experienced Participants:

- They based decisions heavily on past experiences and current conditions.
- They conducted in-depth self-assessments, evaluating their own and the group's abilities and preferences.
- They were more highly attuned to environmental changes and group dynamics, especially in unfamiliar or challenging environments.
- Their decisions were informed by reviews, ratings, and localised advice, often tailored to track conditions or specific hazards.

Less Experienced Participants:

- They often deferred to others with more experience, especially in new or challenging situations.
- In adverse conditions, they tended to make more conservative decisions, opting for shorter or safer routes.
- Decision-making was more straightforward in familiar or urban settings, but they exhibited heightened caution in unknown environments.
- Peer influence and signage played larger roles in their decisions, indicating a reliance on external factors.

Main Differences in Decision Making:

- **More Experienced:** Heavily influenced by self-assessment, environmental awareness, and past experiences.
- **Less Experienced:** More cautious, reliant on external advice, peer behaviour, and simpler decision frameworks.

Planning for Day versus Overnight Hikes and Tramps

The planning for day walks tended to be more straightforward and less demanding, while overnight hikes required more extensive preparation, equipment, and skills, particularly for safety and navigating longer routes.

The distinction in planning reflected the different levels of complexity, risk, and commitment involved in these outdoor activities. While some differences existed between **More and Less Experienced Participants**, due to the varying experience and skill sets, the main differences between preparing for a day versus an overnight hikes were:

Time and Distance:

- Day Hikes: Planning focussed on trails that could be completed within a few hours to a full day.
- Overnight Hikes: Required careful planning of daily distances, camping spots, water sources etc.

Gear, Equipment and Supplies:

- Day Hikes: Minimal equipment needing; appropriate clothing, water, snacks, and a map.
- Overnight Hikes: Additional gear was required, including tents, sleeping bags, cooking equipment, and food.

Safety Considerations:

- Overnight Hikes: Higher attention to safety and preparation for emergencies, including carrying PLBs / communication devices and being prepared for adverse weather.

Route Selection and Navigation:

- Day Hikes: Basic route planning was usually adequate, using well-known and marked trails, and apps like AllTrails or the Department of Conservation (DOC) website for information.
- Overnight Hikes: More detailed navigation was needed, to explore less popular or remote routes, leveraging personal experience and recommendations from others for route planning.

Bookings and Permissions

- Day Hikes: Generally did not generally require hut bookings.
- Overnight Hikes: Sometimes required hut bookings.

For both Day and Overnight Hikes on private land, permission may need to be sought.

Skill Level and Experience:

- Day Hikes: Generally accessible to a wide range of skill levels.
- Overnight Hikes: Sometimes required higher levels of skill, fitness, and experience to handle terrain and other challenges over multiple days.

Key Differences Between Day and Overnight Hikes:

- Overnight hikes involved more complex planning due to the extended time frame and need for additional gear and safety measures.
- **More Experienced** hikers might seek off-the-beaten-path routes for overnight hikes, while day hikes often followed more established and accessible trails.
- Overnight hikes demanded greater preparation for emergencies, survival skills, and navigation, reflecting a higher level of risk and challenge compared to day hikes.

Impact of Context on Decision Making

Participants' decision-making and behaviour were context-dependent, shaped by the interaction between location, group dynamics, environmental conditions, experience, and the availability of information.

More Experienced individuals tended to use their knowledge and past experiences to guide decisions, while **Less Experienced** might rely more on external guidance and cautious planning.

Location:

- Participants felt more confident and might take more risks in familiar locations, relying on their knowledge and comfort with the area.
- In contrast, unfamiliar locations prompted more cautious behaviour, with participants seeking more information, relying on guides, or following marked trails to avoid potential dangers.

People They Are With:

- When accompanied by experienced individuals or experts, participants might feel more confident and trust their guidance, leading to bolder decision-making.
- Conversely, if with less experienced individuals or those exhibiting risky behaviour, participants might engage in riskier behaviour themselves or adopt a more cautious approach to compensate for the group's inexperience.

Time of Year:

- During favourable seasons, such as spring or summer, participants were more inclined to engage in outdoor activities, taking advantage of good weather conditions.
- In winter or during adverse weather conditions, participants tended to be more cautious, avoiding hazardous conditions and choosing safer routes or postponing activities.

Familiarity with the Destination:

- Familiarity with a destination allowed participants to make more informed decisions based on prior knowledge of risks and challenges.
- At new destinations, participants tended to be more cautious, seeking additional information or guidance and being more conservative in their decision-making.

Contextual Factors:

- Decision-making at home often involves detailed planning using maps, technology (GPS, weather apps), and communication tools. On the walk, decisions were more immediate and based on real-time conditions such as weather, trail conditions, and group dynamics.

Balancing Enjoyment with Risk in Decision-Making

When deciding whether to engage in an activity, individuals balanced the potential enjoyment against the risks involved. This decision-making process involved numerous considerations:

Age and Life Stage:

- As people aged, their appetite for risk might change. Older individuals might become more cautious, valuing safety and organisation over thrill-seeking. They might prioritise activities that promised enjoyment without excessive risk.

Fitness and Skill Level:

- Those who were fitter or more skilled might feel more comfortable engaging in activities perceived as risky by others. They were more likely to weigh the potential enjoyment against their ability to manage risks effectively.

Desire for Adventure or Adrenaline:

- Some individuals sought activities that offered a sense of adventure or an adrenaline rush, finding enjoyment in the challenge itself. They might engage in activities that felt slightly dangerous but avoided those deemed excessively risky.

Influence of Others:

- The presence and behaviour of others could impact decision-making. If peers or companions were eager to participate in a particular activity, individuals might feel more inclined to join in, even if they initially perceived the activity as risky. Conversely, cautious behaviour by others could encourage a more conservative approach.

Signage and Guidance:

- Clear information about an activity's risks and requirements could help individuals make more informed decisions, balancing their desire for enjoyment with safety considerations.

Experience vs. Risk:

- Individuals considered whether the excitement and satisfaction they anticipated from an activity outweighed the potential risks. If they believe the experience would be highly rewarding or unique, they might be more willing to accept a certain level of risk.

Past Experiences:

- Individuals used their past experiences to guide future decisions. If they had previously enjoyed similar activities without negative consequences, they might be more willing to repeat them. Conversely, negative past experiences might make them more cautious.

Incorporating Potential for Adverse Events in Risk Assessment

Participants incorporated the potential for adverse events into their risk assessment by carefully evaluating various factors that could impact their safety during outdoor activities (as already discussed).

While **Less Experienced** individuals focussed more on preparation and clear guidance, **More Experienced** participants relied on a combination of past experiences, comprehensive risk assessments, and peer input to navigate potential dangers.

By being mindful of adverse events, both groups aimed to enhance their safety and maximise their enjoyment during outdoor activities, balancing the thrill of the experience with the need for caution and preparedness.

Over Estimating Skill Level and Implications

Participants sometimes overestimated their skill levels and took risks, encouraged by a range of psychological and social factors. These instances of misjudgement had sometimes lead to dangerous situations, requiring adaptability or reliance on luck or external help to avoid severe consequences.

Less Experienced Participants:

- **Navigational Errors:** One participant described planning a three-hour walk, which ended up taking the entire day after their party took the wrong path.
- Another shared an example of a workmate who got lost during a walk.
- **Underestimating Time and Environmental Conditions:** One participant mentioned an incident where they had underestimated the time required to complete a walk, and were caught out in the dark.
- **Overconfidence in Risk Management:** Participants also admitted they occasionally overestimated their ability to manage risks. For example, one participant took a wrong path and spent the whole day finding their way back, while another found themselves in a risky situation while fishing due to unexpected weather changes.

More Experienced Participants:

- **Overestimation of Self-Reliance:** One participant admitted to having broad knowledge in various outdoor activities but recognised that they might not know how to handle emergencies if alone.
- **Underestimating Environmental Risks:** Another recounted being caught and washed away by a river, leading to isolation and reliance on a friend to locate them.

In Summary, the main factors encouraging participants to overlook risks or dangers were:

- Sense of adventure and adrenaline seeking
- Peer influence
- Overconfidence in abilities
- Lack of awareness or knowledge
- Social pressure and group dynamics
- Past experiences and lack of consequences

The implications of overestimating skill levels included

- Safety risks and potential accidents
- Need for external assistance
- (Potential) learning opportunities, so the same mistakes were not repeated in future.

DEPARTMENT OF CONSERVATION (DOC) TRAIL GRADING SYSTEM

Awareness and Knowledge of DOC Trail Grading System

(A summary table of the six trail grades is overleaf)

Participants' awareness and understanding of the DOC trail grading system were inconsistent. While some participants found the system helpful, others were either unaware of its existence or unclear about its meaning.

Among **Less Experienced Participants**, there was a mixed level of awareness and understanding of the DOC trail grading system. Some participants were familiar with the system and found it helpful in determining the difficulty of a trail. They recognised that the grading system was designed to provide guidance on the suitability of a trail for different fitness and skill levels. However, several were unaware of the grading system or misunderstood its purpose. For instance, some assumed that a trail marked with a person symbol simply indicated a walking track, without realising that it was part of a broader grading framework.

There was a suggestion among this group for a more straightforward grading system, such as using numbers or descriptive words, to improve clarity and accessibility for all users.

More Experienced Participants also exhibited varying levels of familiarity with the DOC trail grading system. While some recognised and understand the symbols used to indicate the difficulty level of a trail, others expressed confusion or lack of awareness about the specific meaning of these symbols. For example, they were aware that the symbols represented a grading system but did not fully understand how the system categorised trails or what specific criteria were used.

Impact on Planning and Risk Assessment

Participants noted the following potential outcomes from misunderstanding or misinterpreting the grading system:

Difficulty Level:

- Walkers might not fully grasp the difficulty level or specific hazards of a trail. This might lead to people attempting trails that exceeded their skill level, resulting in increased risk of accidents or injuries.
- They may assume that all trails were suitable for their abilities, leading to overconfidence and potential exposure to unsafe conditions.

Inadequate Preparation:

- Inadequate preparation may result in participants not bringing the necessary equipment or supplies. For example, if they underestimated the difficulty of a trail, they might not carry enough water, appropriate clothing, or safety gear, making them vulnerable to adverse weather conditions or other hazards.
- Participants might fail to account for specific requirements such as the need for navigation tools, first aid kits, or specialised footwear, which could be critical in more challenging or remote environments.

DOC Trail Grades

Easiest: Easy Access Short Walk



Duration: Easy walking for up to an hour.

Suitable for: People of all abilities, wheelchairs, buggies, and strollers.

Standard: Even surface, well formed with no steps or steep sections. Stream and rivers are bridged.

Track markers: No track markers as the track is well defined.

Footwear required: Walking shoes.

Easiest: Short Walk



Duration: Easy walking for up to an hour.

Suitable for: People of most ages and fitness levels.

Standard: Track is well formed, with an even, well drained surface. There may be steps. Stream and rivers crossings are bridged.

Track markers: No track markers as the track is well defined.

Footwear required: Walking shoes.

Easy: Walking Track



Duration: Gentle walking from a few minutes to a day.

Suitable for: People with low to moderate fitness and abilities. Some tracks suitable for mountain biking.

Standard: Track is mostly well formed, some sections may be steep, rough, or muddy. Clearly signposted. Stream and river crossings are bridged.

Track markers: Track is clearly marked where necessary with orange triangles attached to trees. Markers of other colours may be present but these indicate biodiversity work areas and are not walking tracks. Above the bush line, marker poles are used instead.

Footwear required: Walking shoes or light tramping/hiking boots.

Intermediate: Great Walk/Easier Tramping Track



Duration: Comfortable multi-day tramping/hiking

Suitable for: People with limited backcountry (remote area) experience. Some tracks suitable for mountain biking.

Standard: Track is generally well formed, some sections may be rough, muddy, or steep. Track has signs, poles, or markers. Major stream and river crossings are bridged.

Track markers: Track is clearly marked where necessary with orange triangles attached to trees. Markers of other colours may be present but these indicate biodiversity work areas and are not walking tracks. Above the bush line, marker poles are used instead.

Footwear required: Light tramping/hiking boots.

Advanced: Tramping Track



Duration: Challenging day or multi-day tramping/hiking

Suitable for: People with moderate to high level backcountry (remote areas) skills and experience, navigation and survival skills required. Some tracks suitable for mountain biking.

Standard: Track is mostly unformed, may be rough and steep. Track has markers, poles, or rock cairns. Expect unbridged stream and river crossings.

Track markers: Track is clearly marked where necessary with orange triangles attached to trees. Markers of other colours may be present but these indicate biodiversity work areas and are not walking tracks. Above the bush line, marker poles or rock cairns are used instead.

Footwear required: Tramping/hiking boots.

Expert: Route



Duration: Challenging day or multi-day tramping/hiking.

Suitable for: People with high level backcountry (remote areas) skills and experience, navigation and survival skills required. Complete self-sufficiency required.

Standard: Track unformed and natural, may be rough, muddy, or very steep. Track has markers, poles, or rock cairns. Expect unbridged stream and river crossings.

Track markers: Track is clearly marked where necessary with orange triangles attached to trees. Markers of other colours may be present but these indicate biodiversity work areas and are not walking tracks. Above the bush line, marker poles or rock cairns are used instead.

Footwear required: Sturdy tramping/hiking boots.

Overestimated Skill Level:

- Participants may overestimate their skills and attempt trails beyond their capabilities. This could lead to situations where individuals became exhausted, injured, or lost, particularly in more remote or less frequented areas.
- Participants might not consider how their physical fitness or experience levels aligned with the demands of a particular trail, increasing the likelihood of accidents, or needing assistance.

Inaccurate Risk Assessment:

- Walkers might not accurately assess the risks associated with a trail and overlook key factors like steep terrain, river crossings, or seasonal changes that could increase the difficulty of a trail.
- A lack of understanding could also lead to participants not considering how weather conditions or seasonal variations impacted trail difficulty. For example, a trail that was easy in the summer might become treacherous in the winter due to snow, ice, or rain, and might not adjust their plans accordingly.

Suggestions for Improving the DOC Trail Grading System

(Note: We are aware that work has recently been done relating to trail signage and grading and that some / all of the following suggestions may have already been addressed.)

Participants made the following suggestions for improving the DOC Trail Grading System:

Clearer Signage and Grading Descriptions:

- Use numbers or descriptive words (e.g., Easy, Intermediate, Advanced) to clearly indicate the difficulty level of each trail. This could help users quickly understand what to expect and make more informed decisions.
- Include more specific information on signs about the trails' characteristics, such as terrain type, required skills, and estimated time to complete the hike.

Incorporate Technology:

- Implement QR codes on trail signs that link to detailed online resources, including maps, weather forecasts, trail descriptions, and real-time updates. This could provide hikers with more comprehensive and up-to-date information about the trail conditions.
- Ensure that the information provided through QR codes is accessible offline or in areas with poor cell service, addressing potential connectivity issues.

Incorporate User Reviews and Ratings:

- Introduce a user rating scale where hikers can rate trails based on difficulty, time taken, and other factors like terrain and weather conditions. This feedback could provide valuable insights for other hikers and help them gauge trail conditions based on recent experiences.
- Allow users to leave comments or upload photos, enhancing the richness of information available to others planning their hikes.

Seasonal Variations in Ratings:

- Update trail ratings to reflect seasonal variations, recognising that a trail might be rated differently in summer versus winter due to changes in conditions like snow, ice, or rainfall. This dynamic approach would help hikers better prepare for the specific challenges they might face during different times of the year.

Education:

- Increase outreach and educational efforts to raise awareness about the DOC grading system, targeting both local and international visitors.
- Collaborate with local accommodations, hostels, and tourism operators to distribute information about the grading system and emphasise its relevance to safety and preparedness.

Multilingual Information:

- Provide trail information in multiple languages to cater to international visitors, ensuring that all hikers, regardless of their language proficiency, understand the trail gradings and other critical details.

Clear Explanations for Restrictions and Requirements:

- Include information on signs about why certain restrictions are in place, such as no dogs allowed due to native wildlife protection or poison use in the area. This would help visitors understand the reasons behind specific rules and encourage compliance.

INFORMATION AND COMMUNICATION

Main Sources of Information; Hierarchy and Most Trusted

Participants used a combination of official sources, community feedback, and personal experience to assess risks and plan outdoor activities. There was a clear preference for authoritative sources like DOC, MSC (for **More Experienced Participants**) and MetService, but community and social sources also played a significant role in decision-making. Information sources included:

'Official' Sources:

- Department of Conservation (DOC): A highly trusted source for information on national parks, trail conditions, safety guidelines, and downloadable maps. Both **Less and More Experienced** participants relied on DOC for authoritative information.
- MetService: Provides up-to-date weather forecasts, which were crucial for assessing weather-related risks. This source was widely used by all participants to plan outdoor activities.
- Marine Forecasts: Used by participants engaging in marine activities to understand sea conditions and potential hazards.
- New Zealand Avalanche Advisory. Mentioned by some **More Experienced Participants**.
- Mountain Safety Council: Provides information on outdoor safety and risk management. This source was particularly relevant for **More Experienced Participants** focused on higher-risk activities.

Digital and Online Platforms:

- Google Maps: Used by participants for location details, user photos, and reviews. **Less Experienced** participants often use it to get a visual sense of the area and plan their routes.
- Walking Apps and Websites (e.g., All Trails, Roadie App): Provide detailed trail information, user reviews, and recent trail conditions. All Trails is particularly popular among more experienced participants for its personal recommendations and trail reviews.

Social Media Platforms (Facebook groups, TikTok, YouTube):

- **Less Experienced** participants used these platforms to watch videos and get an overview of walks and tracks from other people's perspectives.

Community and Social Sources:

- Word of Mouth and Personal Recommendations: Valued by all participants, especially **Less Experienced** ones, for personalised advice and firsthand accounts of trails.
- Facebook Groups (Hiking and Tramping): More Experienced participants use these groups to ask questions, share knowledge, and get recommendations from fellow outdoor enthusiasts.

Blog Websites:

- Used mainly by **More Experienced** participants for in-depth information, trail reviews, and recommendations based on personal hiking and adventure experiences.

Local Authorities:

- Regional and City Councils: Provide information on local walks, tracks, and parks, often used by both **Less Experienced and More Experienced** participants for planning regional activities.

The Most Trusted and Authoritative Sources Are:

- Department of Conservation (DOC): Considered the most authoritative and reliable source across all participants for comprehensive trail information, safety guidelines, and official updates.
- MetService: Highly trusted for accurate weather forecasting, crucial for planning and risk assessment.

Highly Regarded but Context-Dependent Sources Are:

- Mountain Safety Council: Trusted by **More Experienced** participants for safety advice and guidelines on more high-risk activities.
- All Trails and Walking Apps: Trusted for user reviews and detailed trail descriptions. **More Experienced** participants valued these apps for peer feedback and recent trail updates.
- New Zealand Avalanche Advisory.
- Community and Social Sources: Facebook Groups and Personal Recommendations: Valued for real-time updates, advice, and social proof. **More Experienced** participants tended to use these sources more frequently for specialised insights.
- Blog Websites: Provide in-depth personal experiences and were valued by **More Experienced** participants for detailed, qualitative information.

Less Reliable Sources but Popular for Overviews are:

- Google Maps, TikTok, YouTube: Used mainly by **Less Experienced** participants for visual overviews and initial impressions of trails. While these sources provided useful general information, their reliability could vary.

Information Which May Prompt Walkers to Reconsider their Plans:

- Up-to-date and Detailed Information: Participants would reconsider their plans if they had access to the latest updates on weather conditions, trail statuses, and potential hazards from trusted sources.
- Clear Signage and Warnings: Physical signage providing explicit warnings about dangers (e.g., slips, unsafe conditions) were effective in prompting reconsideration.
- Peer Influence and User Reviews: Observations of peers adhering to safety guidelines or sharing cautionary tales could encourage participants to rethink their decisions.

Trail Messaging and Signage - Recall and Actions

Participants recalled a variety of messaging and signage on walking trails., for example:

- **Safety Warnings:** Signs about unsafe caves, slippery rocks, falling debris, algae blooms in rivers, and warnings against swimming in certain areas, grading systems indicating the difficulty of walks, and signs advising against going past certain points or into unsafe areas.
- **General Preparedness and Safety:** Messages emphasising the importance of good footwear, being prepared with proper gear (e.g., jackets, food, emergency supplies), and having a reliable hiking partner and reminders to research and plan ahead, especially for overnight walks, including carrying necessary equipment.

Their actions in response to messaging varied based on their experience level, perceived risk, and the clarity of the information provided.

- **Less Experienced Participants** *claimed* they took safety warnings seriously if the signage was clear and explained the reasons behind the warnings, and would adjust their behaviour by taking a different route or preparing better. For example, avoiding slippery rocks and unsafe swimming

areas. While some used apps or websites like All Trails and DOC for planning, they might also rely heavily on signage encountered on the track for real-time decision-making.

- **More Experienced Participants** *claimed* they assessed the situation and made decisions based on their judgment, even when they encountered safety warnings. They were more likely to evaluate the risk themselves, considering factors like their own experience, the specific challenge, and the potential for adrenaline or adventure. If the signage was old or vague, they might choose to rely on their knowledge and experience instead of strictly following the warnings. They might also supplemented signage messaging with information from multiple other sources before making a decision.

The primary factors which had prompted participants to ignore warning or safety information were:

- **Overconfidence:** Overestimating abilities and underestimating risks.
- **Peer Influence:** Seeing others disregard safety signs without immediate consequences can encourage participants to do the same.

SOCIAL CONTEXTS

Experience of Group Risk Culture

Participants' experiences with group risk culture varied widely, impacting decision-making, planning, and risk assessment during outdoor activities. The dynamics within a group, such as risk tolerance, experience level, and group composition, played a significant role in shaping how decisions were made and how risks were managed.

Within groups, participants often encountered varying levels of risk aversion. Some individuals might be more cautious and prioritise safety, adhering strictly to guidelines and warning signs. These participants typically advocated for safer, more conservative decisions and emphasised personal responsibility and adherence to safety protocols.

Other members of the same group may have a higher tolerance for risk and push for riskier actions, sometimes disregarding safety warnings in pursuit of excitement or novelty. This divergence in risk attitudes could lead to conflicts or disagreements within groups:

Risk-Averse vs. Risk-Taking Members: The presence of both risk-averse and risk-taking members could create tension, with risk-averse individuals feeling pressured or uncomfortable when others in the group were more willing to take risks, potentially leading to disagreements or a need for compromise.

Balancing Safety and Adventure: Groups often needed to negotiate between safety concerns and the desire for adventure. Effective communication and mutual respect were crucial for finding a balance that ensured both safety and enjoyment.

Influence of Dominant Personalities: In some cases, more assertive or adventurous individuals dominated the decision-making process and decisions that favoured riskier activities. Conversely, groups with more cautious leaders might lean towards safer choices.

Group composition and dynamics also played an important role:

- The presence of children or less experienced individuals often lead to more cautious decision-making. Groups might focus more on ensuring safety, choosing less risky activities, and planning more thoroughly.
- Some participants believed males were more risk prone and females were more risk averse (though some felt the opposite.)

Groups composed of more experienced members might have a better understanding of risks and the skills needed to manage them. Experienced individuals often took on leadership roles, guiding less experienced members and influencing the group's overall approach to risk.

Impact of Group Risk Culture on Planning and Risk Assessment:

Group risk culture could significantly impact decision-making, planning, and risk assessment in outdoor activities and the variation in risk attitudes, experience levels, and group dynamics could lead to diverse approaches to safety and adventure. Effective communication, respect for different perspectives, and a willingness to negotiate and compromise were essential for balancing safety and enjoyment within the group.

Impact on Group Risk Culture on Planning Activity:

- Groups may defer to the more experienced or knowledgeable members for planning and risk assessment. This reliance could lead to better-informed decisions but also a lack of personal responsibility among less experienced members.
- The desire to maintain group harmony could lead to groupthink, where members conformed to a perceived consensus without critically assessing risks. This could result in either overly cautious decisions or, conversely, riskier choices if the group was dominated by more adventurous individuals.
- Social media influence, such as the desire for impressive photos or experiences, could push groups toward riskier behaviour, overriding safety considerations.

Impact of Group Risk Culture During the Activity:

- The group's approach to risk assessment might change in real-time based on conditions and group dynamics. If new hazards arose, groups needed to quickly reassess and potentially alter their plans. The level of experience within the group significantly impacted these decisions.
- Individuals within the group might feel pressured to conform to the behaviour of others, even if it conflicted with their personal risk assessment. For example, if a group leader decided to proceed despite adverse conditions, others might follow to avoid dissent or to maintain group cohesion.
- Groups might engage in discussions and negotiations to decide on the best course of action, especially when encountering unexpected challenges or hazards. However, the group's decision-making process could be influenced by the most vocal or assertive members.

Challenges and Impacts of Group Risk Culture:

- Finding a balance between differing risk tolerances could be challenging, potentially leading to tension or conflict within the group.
- Group settings may lead to a diffusion of responsibility, where individuals rely on others to make decisions or assume that others are better equipped to handle risk assessment, which can diminish individual accountability.
- In groups with a high tolerance for risk, there might be a tendency to amplify risky behaviour, especially if the group dynamic favoured adventurous activities over safety considerations.

The upside of group risk culture were that groups provided 'safety in numbers,' offered diverse perspectives, and shared the burden of risk assessment and decision-making, potentially leading to more comprehensive planning and risk management.

Impact of Site Familiarity on Decision Making

Familiarity with a location played a crucial role in decision-making and planning for outdoor activities. It provided confidence, enhanced safety perceptions, and allowed for more informed risk management. However, it could also lead to complacency, underscoring the importance of continually reassessing risks and conditions, regardless of how well one knew an area. Both **Experienced and Inexperienced Participants** needed to balance familiarity with vigilance to ensure safe and enjoyable outdoor experiences.

Increased Confidence and Comfort:

- Individuals who were familiar with a location tended to feel more confident navigating the area. This familiarity could make them feel more comfortable making decisions about routes and activities, as they already knew the terrain and landmarks.

- Familiarity could lead to a greater sense of security, encouraging individuals to take on more challenging or adventurous activities. They might feel more assured in their ability to handle unexpected situations because they had prior knowledge of the area.

Awareness of Risks and Hazards:

- Familiarity provided individuals with valuable information about the specific risks and hazards of a location. This awareness enabled them to take appropriate precautions, such as choosing safer routes or carrying specific gear.
- With a better understanding of potential challenges, individuals could plan their activities more effectively, selecting suitable times, routes, and necessary equipment to mitigate risks.

Perception of Safety:

- Familiarity with a location often came with positive past experiences, which could lead individuals to perceive the area as safe. This perception could influence their willingness to engage in activities or take risks, as they associated the place with safety and comfort.
- However, familiarity could also breed complacency, whereby individuals developed a false sense of security, believing they were immune to risks because they "knew the area." This complacency could lead to overlooking current conditions or underestimating new risks, potentially resulting in poor decision-making.

Impact on Planning and Preparation:

- Familiarity allowed for more tailored planning and preparation. Individuals were able to anticipate the specific requirements of the location, such as weather patterns, terrain challenges, and availability of resources. This knowledge helps them prepare more thoroughly, enhancing safety and enjoyment.
- Familiarity could also lead to more efficient packing and preparation, as individuals were less likely to over-prepare or carry unnecessary equipment. They knew exactly what was needed for the environment they were entering.

Influence on Others' Decisions:

- Those familiar with a location often played a guiding role for less familiar participants, influencing group decisions. They might offer advice, set expectations, or even lead the planning process, leveraging their knowledge to enhance group safety.
- Group settings and familiarity with a location could impact the overall group risk culture. Those with previous knowledge and experience might encourage more adventurous plans or caution the group based on their knowledge of potential risks.

Differences Between Experienced and Inexperienced Individuals:

- For **More Experienced** individuals, familiarity with a location enabled them to assess risks more accurately and make informed decisions based on previous encounters with similar conditions. They were likely to consider a broader range of factors, such as changing weather patterns or seasonal variations, when planning activities.
- **Less Experienced** individuals might rely heavily on familiar areas to build their confidence and skills. However, they might also underestimate the risks if they assumed familiarity equated to safety without considering current or new conditions.

APPENDIX - VERBATIM COMMENTS

PERCEPTIONS OF SAFETY AND RISK

"Nine times out of 10 it's based on the conditions more than it's more going to be, if that's going to suck the ski, we're not going to just get it rather than, that seems dangerous, we shouldn't ski. It's usually more of a joy than a safety factor. But yeah, if it's going to be unpleasant, we're just not going to go." (Experienced)

"You want to enjoy the experience which, in turn, means it is safer as well. If you get there and it's rubbish, then you're like, well I'm not going to have fun but also I'm not going to see anything. Waves are going smack me against rocks (when freediving)..." (Experienced)

"A couple of times that it's been pretty large (surf) and I've kind of thought maybe I won't go all the way out to the back or something like that. And that's more, I don't want to get flung out of my kayak and then have to try swim back in to shore. But that just means I won't go further out, I'll just going to stick closer to the beach kind of thing." (Experienced)

"But it's probably also because I've been and I've done that in those conditions and they sucked and I did not enjoy that last time. So you've learned it's not just a judgement call. I have been and done that and experienced how yuck that can be. I don't want it again. You've already made that stupid decision before." (Experienced)

"My job is risk management as well. I guess it flows through to how I approach the activities I do as well." (Experienced)

"Paying for a skydive or something, the risk is kind of taken out there. You still get the adrenaline, but it doesn't feel risky." (Experienced)

"If I was looking for risk, I'd be going, I don't know, jumping out of helicopters or there's more things that I could think that I would do that would be more high risk. But I guess it's, yeah, going out on the boat is a risk, but the rewards of that, you get to see dolphins and whales and wildlife and catfish and sunsets and photography and just all of that stuff that comes along with it. But I don't really think about the risks until the weather turns to shit." (Experienced)

"Mine's like a seven out of ten (Risk taker). Yeah, I used to be 10 when I was a kid, but then I got hurt too many times, so now I'm a little bit more cautious. It was literally a jump off cliffs, so nuts. But now because I got hurt too many times..." (Experienced)

"I'd say I'm an eight (out of ten for risk taking). There are sometimes you're like, yeah, let's go on this. This will be a 10 or yeah, this one's going to be a six. There's elements and the 10 is usually because there's a bit of reward there. It might be really, really hard, but it could be really good. It might be really, it could be quite risky going there, but it's going to be worth it or nah, that's this weekend just have a six." (Experienced)

"You guys want a 10. If you guys haven't done it. We were like, oh, let's just do the Hanmer Springs, jet boat. Have you guys all done that? We got the guy that was, he is actually, excuse my language, but, we were this close to the rocks, like my partner who was a fisherman, born on a boat, a grown man was literally crying being like, I'm going to fucking die. It was a 10." (Experienced)

"Nothing to do with adrenaline. If there's any adrenaline that's wrong." (Experienced)

"Yeah, diving would be completely calm, but kayaking, I love when the waves are too big and knocking me around and that's exciting. So, it is dependent on the activity you are doing." (Experienced.)

"Quite often we'll see a sign and we kind of take our own risk judgement on things. If we saw this, we might do a little bit of walking around it and stuff or when there's a waterfall or something, we might go off the track a little bit, but it's always kind never too far and it's calculated. Yeah, definitely." (Experienced)

"Yeah, nothing too risky or anything but something that feels a little bit dangerous I guess is a little bit more fun generally." (Less Experienced)

"I'm too old, too old to not enjoy whatever I'm doing. I would rather try again another day, et cetera or just do something else. Yeah, same when I've turned up to do stuff and it's too busy. No I don't like that. Or too hot, too cold, too windy, a bit fussy, that type of thing. I'd rather just go and do something else of a plan for a walk and it's cold, I'll take them swimming or there's always something else to do. I just don't want to do it. I just feel miserable." (Less Experienced)

"It's reasonably easy (Cave Stream) but be prepared and because the water's so cold and because it's around mountains and tributaries, so when there's been rain and you could get floods and so that's the stuff you've got to be aware of the conditions." (Less Experienced)

"Same as the Cave Stream Walk as well, right? If you say there's a sign saying cave is unsafe or whatever, I mean that's part of the risk of going into nature in general. So if you see everybody going up there taking photos, most people are going to be like, all right, well I'll accept that risk." (Less Experienced)

MISHAPS AND ACCIDENTS (AND LESSONS LEARNED)

"There's been a few kayaking. A few that people would tip over in the kayak and down the river and either not come up or we had one guy dislocate his shoulder after he rolled over so he couldn't really roll back up and couldn't reach forward to pull his skirt off. And yeah, a few little close calls like that." (Experienced)

"This year we were out trolling, all of a sudden there were swells that I seriously thought the boat was going to tip. All of a sudden it was just rogue waves, like these huge waves. And the boys were like, you could see they were nervous and when they're nervous it makes you even more because these boys are tough boys and when you're the only girl on the boat and they look at each other sideways and try not make me feel worse, but they're just like, oh shit, what the hell are we going to do? We were so far out. We couldn't do anything we just had to go back to shore. I think it was the wind because we checked all the forecast, we checked the nav, we checked everything." (Experienced)

"I guess lots of little things where often I guess there's always an inherent risk, especially back country, and stuff as well. But a lot of the times something will happen that we anticipate to happen. You might slip there but you knew you were just going to slide and stop with that little bit of snow down there or something. But then we have had some worse ones, like one friend set an avalanche off and lost the ski at the same time. Looking back it was when you get back to the car, sort of realise how much scarier it could have been when you actually think about what could have happened." (Experienced)

"The worst thing that happened was when we didn't pack any food - maybe it was four hours - but we got to halfway and he's like, yeah, we have to stop and turn around. So now always go hiking with a little bag of lollies at least." (Experienced)

"We had one guy who tried to take a shortcut over some bluffs on a hunting trip in Nelson Lakes and climbed up and up and up and up and up and up, but then couldn't come down again, gotten so steep that he was basically afraid he was going to lose his footing and then started to lose his footing and get hurt. So he pulled his beacon and then they came zipping along and helped him out of the bluffs." (Experienced)

"... I was not on the site and then everyone turned up, oh have you seen so and so, and I was like, no, I haven't seen them and it was two days later. And what he'd done is they went up into the hills during a sunny day. It was all good and they just went, oh okay, we'll just pick a shortcut. And then they went over the hills and then they got lost but suddenly the shortcut or the track wasn't there and then they spent about two days winding around up there and so eventually they found the railway tracks. So it was like ,don't take that shortcut." (Less Experienced)

"No, it's huge. It's huge but it gets a bit claustrophobic and you've got to get through some water and the last bit to get out, you've got to swim to the ladder and then climb up it, which is my that I was too short to even reach the first rung. It was really hard to get out." (Less Experienced)

PREPARATION AND PLANNING

"Because we ski every day that we can throughout the winter we're continuously monitoring, I guess long term we're continuously monitoring the weather all the time. Mainly to understand what is under the current snow. You could have really nice snow here, but two months ago it rained, you'd have a half a metre of really nice snow, but then it slides on it. So we monitor that throughout the season on the day we would or the night before. There's a lot of avalanche advisory websites, really, really good. People like guides and other people report what they've seen, do a forecast with a waiver that they don't take responsibility, but these are our observations. So we do all that. And then we also have them at the time we have sort of a very solid understanding that if one of us doesn't want to go, no one goes or we have, it helps that we've been friends for a decade that we're all in the same boat, all similar of the skill or no one's sort of a hot shot, but no one's also trying to pull, no one's being a dickhead, no one's being a lily." (Experienced)

"My best friend that did a lot of hikes and stuff where she was quite knowledgeable when would do all the research and so I was quite happy with taking her advice. I guess that can be a bit of ignorance in some ways, but also I really trusted her." (Experienced)

"You, or especially if you go adventuring anything outdoorsy with a group of slightly less experienced people, but you start to realise that they look to you because you just by the stories they've heard or things that you've seen you do on the weekends or something, start to general feel. They're asking you a lot of questions and you click while they're actually looking for me for support or guidance." (Experienced)

There is always an element of planning and commonsense when we are going for walks, it's that water jacket, t-shirt, sun hat because you tell tourists often enough and make sure you've got, because weather we change all five times up in mountains and during a walk. (Less Experienced)

"Yeah, because we play ice hockey, we know a lot of Canadians and stuff. We go, oh you dunno cold. It's fine, I'm going, our cold's different. And then it'll start off nice and it's just a nice cold winter, then you get a damp wind through and it nearly kills 'em and going that's what we mean it's not cold like dry, icy cold. Ours is a different sort of cold and it'll kill you." (Less Experienced)

"People are idiots and you can't get around that. Like, it's when it says don't drive because it's flooding and then there's always some idiot sitting in the car floating down the river. They've gone to have a look. You have to make a judgement call not just for yourself, but on how your actions are going to impact other people." (Less Experienced)

TRAIL MARKERS AND SIGNAGE

"I never realised that was actually a grading system but I've definitely seen these all over on the walks I've been on." (Experienced)

"I guess if I think about the areas that I go and you see a sign that says no dogs, no dirt bikes, no camping. This almost, if I just saw that picture, that would just say to me, yes humans are allowed rather than maybe this is good for adults and children for a five minute walk or maybe this would say climbing is allowed rather than, hey by the way this is a hard climb. Maybe a bit more clarity that is grade than just permission." (Experienced)

"Read the DOC sign and take two or three hours off it." (Experienced)

"I've never really clicked before, but that means that this is an easy medium and moderate hike. I've just always thought that that meant you're allowed to go there." (Experienced)

"I'd take notice of all signs ... especially if they're talking about large slips and wash outs. It's like I'm long gone by the end. Definitely no thanks." (Less Experienced)

"I think also when you talk about should there be some sort of system of saying don't go out for these walks, unfortunately you're going to deal with the kind of people who will go past the signs that say don't go past here. I mean there's a certain type of person who will get bloody minded about, oh DOC, just being a big bunch of cry-babies. I'm going out anyway." (Less Experienced)

"That's what I would do if I saw that danger sign, I would just go, oh cool, what this is and then I might mosey along ... ashamed to say." (Less Experienced)

"There was a walk, it was on, I was down south, it was called something like the Blue Pools and it had there that it would've been closed but it'd been closed for three years. But it was advertised as the best blue pools in New Zealand or whatever it was. And virtually everybody was just going past the signs because it was, you'd made a special trip, there was massive car parking, there was facilities like toilets, so it had been offline for three years and you're like, well I've made this trip especially to see it. Nothing I had looked to see and nothing had told me that it was closed and everybody was pulling into this layby to go and do this walk. So the vast majority of people just carried on to essentially come face-to-face with the risk and then assess it themselves." (Less Experienced)

"So like you said, if you have a sign that says a gradient from there and it's don't bring your dog, it's because of this reason. Because people will probably read the sign if they know it's because it's really specific. Because otherwise you get there and you're thinking well whatever, we are already here." (Less Experienced)

INFORMATION

"I mainly use All Trails, which is just a free app that has walks all around the world and you can just go on the map and I just normally zoom in and have a look and then when I've normally been on walks with other people, we normally just go off the DOC website." (Experienced)

"People can do the walks and review them. So a lot of the times it grades them on the sort of level you should be at before you do them and how hard it is and then people will write sort of like, I did this in the winter, it was really good. Or don't do this when it's raining. It could be really steep and slippery and they'll kind of rate how accurate the grading that is on the app. Whether they're like, oh this said it was hard but it was really not that hard." (Experienced)

"But also with social media these days as well, you can search so much. People review walks and take videos and show you these the kind of views that you're going to see. So if you'd prefer coastal or forest or social media is a big one these days I think." (Experienced)

"There's an app called Roadie. So Roadie can be quite good and then they don't just have the app, they've got TikTok videos and they spread their reach quite far and wide. And the other thing is, well I'm part of quite a few hiking and tramping Facebook groups where there's like, I know 10, 20,000 people that are part of these groups and they just share." (Experienced)

"So Mount Hutt, if you go on their website, you'll see a 5:45 AM update, an eight o'clock update, a nine o'clock update. If I go on there at 5.45 and the forecast is like shit, you're not going to get in your car and drive up there. But they're really good at kind of giving you up to date, detailed information on conditions." (Experienced)

"There's a couple of boating pages that do it also for the sea conditions and stuff." (Experienced)

"I think it's called Climb NZ. It has it grades, hikes and climbs and technical mountain peaks. (So that's forums, isn't it?) Yeah, you can comment on everything, discuss the different climbs and yeah, there's probably, there's a lot of very good, distilled information in there with people and climbing nerds and hiking nerds and all sorts of stuff like this. I'm sure there's a lot of slightly less formal websites out there that have got a lot of information to tap into." (Experienced)

"But isn't DOC the final word though, aren't they? Is it true everything comes under them anyway? I mean I could be wrong, I probably am, but isn't DOC like saying they're the big power and then the Mountain Safety Council? Well that's just part of DOC and everything else is underneath them, but ultimately it's the guys who make the signs and they're the law and everyone else is underneath their umbrella. So they'll tell you don't climb, ski or ultimately they're the ones who enforce it. So DOC's the official word." (Less Experienced)

"Quite a lot of walking apps or whatever. I buy into some of those and so they'll have a lot more detail on it, plus they'll have recent reviews of it, that type of thing. And so I normally try and read people's reviews of tracks, et cetera, and so have a look to see when they posted it and that'll give you some more information. I mean if it's specifically a Great Walk and it's owned and done by DOC, I would check theirs. But if it was just a general sort of walk, I probably wouldn't check theirs. I'd go to one of those website club type thing." (Less Experienced)

"Everybody's got their own opinion though and see it a different way. Hence why sometimes with them when I'm looking for stuff that I'm scrolling through, some of people post videos and stuff of when

they've done the walks on TikTok, that sort of thing, or posted something on YouTube and so you can get an overview or a hint of what you are in from somebody else's perspective or almost like a live sort of thing depending on where they've done in a review." (Less Experienced)

"Especially with people probably my age or just a younger generation. People tend to go on TikTok a lot just for literally anything. For me, I'd probably do the same thing. I'd be like, oh, check it out what this person's done on this certain walk and stuff and see what they say about it." (Less Experienced)

CONTEXTS

"I guess there's no egos put it that way where we'd try to maintain that. And then when we go, because we do a lot of hiking and mountain biking and stuff outside of that in summer as well. We've sort of maintained that all the way through, which has been pretty cool." (Experienced)

"And he always does that and he puts us in a position where we are going to override commonsense. And he'll go, no, well I'll just go and do it. So then we kind of go, no, we will do it together, but it's kind only because we know he's only going to get halfway and he's going to be over in trouble or something may happen." (Experienced)

"Because we got kids, so we try and get our kids to do things, so there is calculated risk. We will assess the situation. We can make a swing, and make sure it's going to hold everybody and they'll swing over a thing. Yeah, it still puts willies up me at the same time, I suppose just watching then coming over that fear and oh, we can get across that instead of walking two hours to go around it." (Experienced)

"My wife's sister has got terrible balance just as a default, terrible balance, and something that I would skip over across rocks just takes her a lot longer time. Take that completely for granted and that's where I guess a conservative time is good." (Experienced)

"Because when I did that walk to the caves (Cave Stream) and the hardest part is getting to the point where you just walk around to the cave and that's where it says don't go any further because of the slips and probably because it was me a friend and another one that had children, we had the kids with us and we looked at each other, we thought we've got two dogs and three kids. It says danger - enough is enough - turned around and went back. But if it was just me and a friend with our dogs maybe we would have gone on." (Less Experienced)

"They say that young teenage boys overestimate their own ability. So they tend to be the ones that jump off things or go swimming when they shouldn't. And they are the ones we have to watch when we go out with a group, because they are mad." (Less Experienced)

GOING FORWARD

"There's no reference to weather in any of these gradings. Maybe like if there's river crossings, but a river crossing on Saturday when it was sunny and a river crossing on Sunday on the way back out after a heavy rain." (Experienced)

"But the weather is what gets you in New Zealand. Maybe there's a way to factor in with maybe that's probably because of rain, so maybe that sign at the front, if it had a rain, this track is susceptible to rain." (Experienced)

“Even on the website, I feel like some of the walks in the summer could have an easy rating and then in the winter you could change the rating to more difficult, you need more equipment or you need to be more cautious.” (Experienced)

“Like a swell map for the trails. But today it's green because there's been no rain, it's not muddy, the forecast is great, whatever. Like the boating swell map, one out of 10, there's avalanche one out of 10.” (Experienced)

“What about QR codes. I don't want to say that. That's fine because I hate that. I hate that technology is like that, but most people on a tramp now will, we had their cell phones and so if they could scan it and be like even if it had, honestly, if it had a map of the track; if it had basically just the DOC website of that walk.” (Experienced)

“Maybe goes back to the thing of having an up to date sort of QR code that the information is being refreshed all the time or something. Warnings, weather, track conditions and so on.” (Less Experienced)

“And more clear signage. We were talking about the rating system earlier on. If instead of two little pictures of people, if they had this one is 4.5 out of 10 or something like that. And again explaining why you can't take your dog's there or I think lots of signage because then the more of it you have, the less people claim they didn't see it.” (Less Experienced)

“Yeah, signage probably being an important one. I think a lot of it'll probably just come down to educating them around how to stay safe and be prepared for the outdoors really. I mean the more people get used to being confined to cities, the less prepared you're going to be when they do go outdoors and that's probably only going to get worse. So if you think about the big picture. So yeah, I would say education is probably a really big thing.” (Less Experienced)

“Back when I was younger, there was lots of ads about what to do to be prepared and what to have. So I suppose before tramping season, invest in a couple of ads that say take this, this, and this because I used to do it for hunting and stuff when you had to wear your what those things called life jackets for boating season. They do that in summer. So why aren't we doing the same for walking? Because, and that's easy. You can watch an ad and water, a snack, a jacket, sunscreen, sunscreen, your seatbelt on.” (Less Experienced)