

The Risky Shift Phenomenon: What Is It, Why Does It Occur and What are the Implications for Outdoor Recreationists?

“Climbing is high risk. But for me, there are intrinsic rewards in this risk—an ability to fill the desire for adventure, which we have 7-Elevened out of our life”

- Conrad Anker

Introduction

It is generally accepted that a certain amount of risk is an inherent part of any adventure (March, 1998). Indeed, some have argued that without risk there can be no adventure. Given that hazards are an ever-present and unavoidable component of any outdoor pursuit, the ability to identify, assess and manage the risk associated with these hazards is a critical skill for outdoor leaders.

Hazards associated with outdoor pursuits have been split into two basic categories: objective and subjective (March, 1998). Objective hazards are those associated with the natural environment over which humans have little control. Examples include darkness, storms, avalanche, rockfall, weather, etc. Subjective hazards are the less obvious psychomotor, cognitive and affective hazards associated with the group including factors such as technical skill, judgement, physical fitness, emotional state and group dynamics (March, 1998).

The ability to recognize, avoid and minimize exposure to objective hazards is, of course, an expected characteristic of an experienced outdoor leader. The most successful leaders, however, are the ones who have a thorough understanding of not only objective hazards but also subjective hazards that might be equally as destructive to the group's objectives. An interesting phenomenon that has been observed in a group setting is the “risky shift.” Although it is difficult to obtain precise statistics, it is likely that this phenomenon is at least partly responsible for many accidents and fatalities in the outdoors every year and therefore it is important for outdoor leaders to understand its causes and ramifications.

The purpose of this paper will be to examine this risky shift phenomenon. First, the phenomenon will be described and theories that have been postulated as to why it occurs will be examined. Then the implications for outdoor leaders and recreationists will be discussed, with emphasis on some practical issues that may help leaders and groups to recognize the potential for a risky shift and manage the problem, should it occur.

What is the “Risky Shift”?

This phenomenon was first discovered as part of a master's thesis by Stoner in 1961 and refers to the tendency for decisions made in groups to be less conservative than the decision of the average group member (Shaw, 1976). The results were initially met with surprise in the scientific community as they contradicted some prevailing theories of the time, most notably the “normalization theory” which stated that group decisions would reflect an *average* of opinions and norms. The 1960's saw a flurry of research interest in the area and it was indeed confirmed that group risky shifts occurred. The shift was demonstrated in countries around the world and with many kinds of group participants (Forsyth, 1990).

The risky shift is actually a form of “group polarization” - the tendency of group members to decide on a more extreme course of action than would be suggested by the average of their individual judgments. Interestingly, this polarization is not always towards the risky end of the spectrum – cautious shifts have also been found, though less frequently (Forsyth, 1990). A more accurate description of the situation is given by the group polarization hypothesis (Myers & Lamm, 1976) which states that “the average post-group response will tend to be more extreme *in*

the same direction as the average of the pre-group responses” [italics added by current author]. Therefore, when the average choice of the group members before discussion is closer to the cautious pole of the continuum than the risky pole, a cautious shift may occur. Of course, by very definition, adventurous risk-taking individuals are far more likely to experience the shift in the risky direction.

A further point is worth mentioning. It has been found that a critical element in producing group polarization is discussion (Forsyth, 1990). It has been demonstrated that discussion, with or without consensus, produces polarization; however consensus without discussion yields an averaging effect (Forsyth, 1990). This has important implications for outdoor leaders and will be elaborated upon below.

What causes group polarization and risky shifts?

This is an important question for outdoor leaders to ponder. If there is good understanding of the cause of a risky shift, a group member/leader may be more likely to prevent it from occurring or to detect it when it does occur. Since the discovery of group polarization, group dynamicists have put forward a number of theories to attempt to explain why such shifts happen. These include illusory cultural norms, the diffusion-of-responsibility theory, leadership theories, familiarization theory and value theories (Forsyth, 1990; Powter, 1998).

In the sphere of mountaineering, an example of an illusory cultural norm might be represented by an attitude of “we’re a team on the mountain, therefore we’ll live” (Powter, 1998). Humans are innately social beings and tend to feel more comfortable being part of a social group, a phenomenon known as the herding instinct (Tremper, 2001). This instinct may have served us well during evolution but it can be deadly in the mountains, especially in avalanche terrain. Another common perception trap that could be classed as an illusory norm is to bring our human culture into a non-human setting, in essence a form of cultural arrogance. As Tremper (2001) points out, “city thinking and mountain thinking are very different things...when we go into the mountains, [city skills], more often than not, are liabilities”. Most humans are culturally insensitive to the backcountry, unable to speak its language and unwilling to accept its culture. Every year humans suffer the consequences of such an attitude and many pay for it with their lives.

The diffusion-of-responsibility theory states that group members will be more likely to recommend a risky course of action because of the feeling that they have less personal responsibility for the negative consequences of such a decision within the group setting (Forsyth, 1990). Stated another way, it is easier for an individual to hide within the group when making contributions to group decisions – they can take greater chances because they feel they are less likely to be blamed. A few investigators have cast doubt on this theory though.

Leadership theories revolve around the notion that high risk-takers tend to exercise more influence over group members due to their greater persuasiveness, confidence, assertiveness and involvement in the discussion (Forsyth, 1990). This theory may carry some weight but is undoubtedly an oversimplification. If an individual demonstrates excessive amounts of these qualities, his credibility will almost certainly be undermined. Several researchers have been unable to demonstrate that this leadership effect occurs.

The familiarization theory asserts that as individuals mull over problems with others, they become more familiar with the items; as familiarity increases, uncertainty decreases, creating a willingness to advocate more risky alternatives. This theory appears to tie in nicely with the point made above that group discussion is a critical element in producing a risky shift. This theory would also imply that individuals who are allowed to familiarize themselves with an issue while

alone should demonstrate a risky shift but this has not been consistently found. Therefore, similar to the above theories, some doubt has been shed on whether this is a valid theory.

The most widely accepted theories to explain the cause of a risky shift revolve around the notion that risk taking is a cultural value in itself. The general idea is that people in our society value risk, and in the group situation most individuals want to appear to be willing to take greater risks than the average person in order to be able to enhance their status in the group. Group discussion is essential as it allows the individual to learn his relative standing in the group as a risk-taker. Studies have clearly shown that most people regard themselves as above average risk-takers (of course a statistical impossibility) and tend to exhibit feelings of admiration for others who are perceived as being greater risk-takers than themselves (Forsyth, 1990). These findings provide clear evidence that the underlying assumption of the value hypothesis is correct.

Group dynamicists have developed two schools of thought within this general approach (Forsyth, 1990). The “social-comparison” theory argues that group members are trying to accomplish two inter-related goals during discussions. First, they are attempting to evaluate the accuracy of their own position on the issue by comparing it with others and, second, they are trying to make a favourable impression with the group. The result is a tendency to describe one’s own position in more extreme terms. The “persuasive arguments” theory, in contrast, stresses the information obtained during discussion and asserts that if the individual is exposed to a persuasive argument, they are more likely to shift or move their own decision in that direction. Both of these theories have been supported by researchers and this has prompted several investigators to suggest that the two processes combine to produce polarization.

Implications of the risky shift and practical issues for outdoor leaders

A key question to be addressed in this section is in what kinds of situations is a risky shift most likely to occur? Armed with this information, prevention, detection and/or management of the phenomenon becomes substantially easier. The answer will unfortunately never be clear-cut, as the operation of any group, even the smallest, is a complicated union of many factors. Powter (1998) discussed group dynamics in a number of common wilderness experience situations: the guided trip, the growth/challenge experience, the personal recreation experience and the expedition.

The guided trip has probably the simplest and clearest norms for the group concerned, ones that are common knowledge; the guide makes the decisions in virtually all situations and client involvement is a matter of the guide’s discretion. Democracy in this instance would defeat the client’s intent in hiring a guide - to be provided with a controlled experience. As there is, in theory, little discussion between guide and client about precise details of the guided experience, there should be little opportunity for a risky shift to emerge. Of course, there may be situations where a group might conceivably place some pressure on a guide to attempt to change or modify a decision, but the guide always has the final say in decision making and most guided clients will respect this fact.

The growth/challenge experience, such as those offered by Outward Bound, uses the wilderness as a classroom for both skills and self-learning (Powter, 1998). The experiential learning model used necessitates a certain degree of democratic empowerment of the student which increases the possibility of a risky shift. However, the leader/instructor makes the autocratic decision as to the level to which the students will be empowered to make decisions and exercise control. Therefore, similar to a guided trip situation, excessively risky decisions will likely not be implemented.

The personal recreation experience is a classic situation where leadership issues and group process norms are often not clearly defined. The situation can be very confusing for group members and emergent leaders, particularly if active and open communication is lacking. It can be democracy in its truest form – the “free-for-all” – but unfortunately this kind of scenario is precisely the one where the risky shift has the greatest chance of surfacing. Characteristics of group members that might further increase the chance of a risky shift occurring will be discussed further below.

The expedition is a situation where group dynamics become exponentially more complicated. As individuals have usually invested substantial time and money into such an experience, they have more to gain and more to lose and will be far more likely to fight for themselves. A paradox operates here: people on expeditions are usually strong independent individuals who often struggle with authority, but once on the expedition they are essentially in a controlled situation. Hardly surprisingly, tension often ensues and decisions may be clouded by this fact. The expedition leader is in a very delicate situation and must be sensitive to environmental and intra-group factors and prepared to be somewhat flexible with his/her leadership and decision-making style, depending on the situation. One could argue that risky shifts are more likely to occur on expeditions as individuals are often prepared to take greater risks to achieve their goals/dreams. However, this would be pure conjecture as there are a multitude of factors involved that are in a high state of flux.

It has been established, then, that the personal recreation trip, and the corresponding democratic decision-making process that tends to accompany it, is prime breeding ground for a risky shift. What are some further group characteristics within this situation that might influence the emergence of excessively risky decisions? Some factors that may come into play include size of the group, gender, age, personality, skill ability, cultural origin and mood of the group members.

Though little information could be found in the literature about the affect of group size on a risky shift, the topic deserves some attention. If one accepts some of the theories presented above regarding the possible causes of group polarization, it would seem reasonable to speculate that risky shifts may be more likely to happen in larger groups than smaller groups. Imagine a scenario where a small group of two individuals are deciding whether to ski a questionable snow slope versus the same situation but with a group of six individuals. Humans tend to feel safer when in larger groups and also there is a greater chance that someone in a larger group may have a more extreme view that might influence the group’s decision. Intuitively, one might deduce that there is a greater chance of a risky shift with more group members. It is unlikely, however, that the chances of group polarization will continue to increase with increasing group size. Presumably, a point will be reached where the democratic decision-making process will be “bogged down” by the increasing numbers involved. The affect of group size on the emergence of a risky shift in the outdoor setting would be an interesting area for future research.

There are vast amounts of scientific research that suggest that males are greater risk-takers than females (Wilde, 1994), a trait that likely has both physiological (hormonal) and social roots. Numerous accident statistics support this assertion. For example, in the period 1984-1996 in Canada, 90% of avalanche fatalities were male (Jamieson & Geldsetzer, 1996). In addition, the age category with the greatest fatalities was 20-29 (just under 30%). This agrees with research that has consistently shown that young individuals show greater proclivity for risk than later years. Therefore, it appears that *young males* may be particularly susceptible to a risky shift. Undoubtedly, there is truth to the statement, “Know the male yet keep to the female”! (Lao-tsu). Tremper (2001) states that, “I like to go into the mountains with women. I feel like I’m safer

when I do. When I am out with my male friends, I know that I have to keep a sharp eye out for competition, pride and all the other traits that tend to go along with groups of men, because I'm often the worst of the bunch."

Risk-takers also tend to be more competitive, aggressive, type A personalities than non risk takers (Begum & Ahmed, 1986) – "sensation seekers" as they are often called. A further finding that has emerged from avalanche accident statistics is that victims are often skilled in the activity (skiing, snowboarding, snowmobiling, etc) during which they suffered the accident (Tremper, 2001). It is likely that overconfidence in one's skills "spills over" into one's decision making regarding hazard and terrain assessment.

Some interesting findings have emerged regarding cultural origin and risk taking. It appears that male Caucasians of western origin are amongst the most "risk prone" individuals. Hong (1978), in a comparison of Chinese and American students, found that cautious shifts were far more likely in the former and risky shifts were far more likely in the latter. As discussed above, this is likely related to the value that risk carries in the Western culture as opposed to Asian cultures.

Finally, the influence of mood on group decision making and risky shifts is of importance and must be recognized. Heli-skiing guides are very aware of the euphoria phenomenon – clients skiing untracked powder may be so deep in the throes of ecstasy that they fail to listen to directions. Also, it is known that most avalanche accidents occur on the sunny days following a large snowfall when people are likely too busy enjoying themselves to pay attention to the hazards around them (Tremper, 2001). "Summit fever" is another example – becoming fixated upon a goal at the expense of sound decision making. Negative moods, however, may also cause risky shifts. Take the scenario of a group of hungry, cold and wet hikers in foul weather who want to get home at the end of the day. The tendency will be for the group to rush decisions and cut corners which could have serious consequences. Just when they most need to pay attention, the weather and their mental state has pushed them to do the opposite.

Summary & Conclusions

Most outdoor enthusiasts and hopefully all outdoor leaders understand the importance of respecting objective hazards in the backcountry. There appears to be less appreciation for some of the more subtle subjective hazards associated with group members and group dynamics, yet these are no less important to understand. The risky shift is an example of such a hazard. In the outdoor setting, risky shifts are most likely to occur on a personal recreation trip where the group members consist of young, competitive and enthusiastic Caucasian males who perceive that they are highly skilled in the activity in which they are engaged. The risky shift is one of many cognitive factors that can contribute to poor safety decisions in the outdoors, including lack of experience, inappropriate attributions, inattentiveness, "smelling the barn" and simply poor judgment (Priest & Gass, 1997). The importance of active and open communication amongst group members as a form of hazard avoidance cannot be underemphasized. If excellent communication combined with a deeper understanding of subjective hazards were a major priority for all groups involved in outdoor pursuits, there would undoubtedly be less accidents and fatalities annually in the wilderness.

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