

Human Factors In Sea Kayaking

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“Even though people are capable of making decisions in a thorough and methodical way, it appears that most of the time they don’t. A growing body research suggests that people unconsciously use simple rules of thumb, or heuristics, to navigate the routine complexities of modern life” IAN MCCAMMON, 2002.

There’s some really interesting research into leadership decision making by British Canoeing and other outdoor pursuits organisations. Sea Kayaking is an outdoor sport in which, inherently has risks. Reading books of pioneering sea kayaking expeditions and adventures with a lack of safety kit and boat design features, sea kayaking has come along way in the last 100 years. The boats we use and the kit we carry for a short paddle has come on leaps and bounds. However each year incidents happen both within personal paddling and a commercial environment.

Commercial guides, clubs and volunteers working within a position of responsibility in Sea Kayaking frequently have to make decisions to safely guide a group. With so many changing dynamic factors such as conditions, location & group, decisions made need to be unique and flexible. However as a guide develops experience and has been leading for many years. Do we build a template or rule of thumb for what it will look like around that headland, how the participant may respond to a swim or how to land a group through the surf zone.

Lots of research within heuristics by Ian McCammon has come from the Off Piste Ski world in which I will adapt for Sea Kayaking. Here it suggests some of the heuristic traps a paddler or guide may fall for can be broken into the following FACETS. **F**amiliarity, **A**cceptance, **C**onsistency / **C**ommitment, **E**xpert Halo, **T**racks / **S**carcity, **S**ocial Facilitation. Problems arise when we use these mental evaluatory shortcuts to form our decision making unthinkingly, in risky or constantly changing environments.

Familiarity

The tendency to believe that our behaviour is correct to the extent that we have done it before. Our brain creates short cuts and uses past actions to guide our decisions. Things that are familiar to us appear to be safer, even when they may not be.

In Sea Kayaking familiarity comes with paddling a local stretch of coastline that we are comfortable with or perhaps running a rock hopping feature. We should anticipate that it’s possible for our local stretch to have changed, the beach topography of sandbars to have shifted or for the rocks to have moved or fallen within a rocky feature. Lands slides and rockfall can cause dramatic changes to features and in an environment constantly worn away by wind and waves these changes can happen frequently. “Never run anything blind”. Familiarity tends to affect those who are more experienced.

Acceptance

The Tendency to engage in activities that we think will get us noticed or accepted by people we like or respect, or by people who we want to like or respect us. People may follow other

paddlers into unsafe water because others have done it, or they could make riskier choices in order to be accepted socially by others in their group.

The desire to be accepted is a fundamental human trait - it can be a tool used for paddlers to push themselves and develop but can also lead to paddlers pushing themselves into the fear zone. McCammon's research focussed on gender acceptance, showing that mixed gender groups would place themselves in riskier situations than all male groups.

Consistency / Commitment

Once we have made an initial decision about something, subsequent decisions are much easier if we simply maintain consistency with that first decision. The brain, again makes shortcuts that make our decisions easier. Completely re-evaluating a plan can take a lot of brain energy.

The first issue is sticking to a single plan and not adapting for the group and conditions. This can be harder with a larger group or in a commercial setting where people have taken leave or booked accommodation. Of course it is good to make a plan before we go kayaking however this plan needs to be flexible to take unanticipated changes in the environment into account. If we stick with the a single plan we layer bad decision on top of bad decision in order to fit with the plan, rather than adjust the plan itself. When planning trips months in advance this adds to the consistency and gathers a certain momentum towards the point of the single plan.

Another type of consistency that should be considered is consistency of self image. Within sea kayaking there can be specific niches; rollers, circumnavigators, surfers, rock hoppers, open water crossers etc. Is there a chance that someone who identifies as one of these niches and the behaviours attached to them will place themselves in higher risk situations in order to remain consistent with that image.

Expert Halo

Groups tend to follow a leader, even when this leader may not have adequate experience or decision-making skills, because the person gives a halo of expertise. This leader could lead a group into dangerous situations. This is compounded by the other group members not being able to differentiate between expertise and 'bluff and gusto'.

When leading groups I've at times questioned the group, at times learners have expressed that they are in the fear zone but "its okay because you're with me". Up until that point they have seemed calm and collected and not expressed fear. If they has expressed there were uncomfortable before this point perhaps we wouldn't have pushed on.

Tracks / Scarcity

The tendency to value resources or opportunities in proportion to the chance that you may lose them, especially to a competitor.

If people live further away from the sea or have limited access or time to go sea kayaking perhaps they will place themselves in higher risk situations because they perceive that the resource is scarce. This could also be true with paddling a certain stretch in less than perfect conditions.

Social Facilitation

The tendency to believe that a behaviour is correct to the extent that other people are engaged in it. When a group is confident in their skills, they tend to make more risky decisions. Also, groups or members may follow other groups just for the sake of following - following is easier than leading.

We tend to be more likely to expose ourselves to risk without consideration if we feel others may be watching. Take for example a group of people on the beach cheering you on in the surf or paddling through a dynamic rocky feature with your friend filming from the cliff top. Insidiously, social media tends to exacerbate this effect as our exploits are now easily broadcast to a wide audience.

These Facets are influential but that influence is also effected by other variables such as group size, training and group dynamics.

In order to avoid falling for the Facets we need good planning. A concept put forward by Colin Zacharias of the three option plan (Ideal, Safer, Safest) builds in an element of flexibility. For example with Low winds and a 1.5m westerly swell a journey from Mullion to Lizard Point is ideal, a journey from Kennack Sands to Lizard point is Safer, a Journey from Porthoustock to Black Head is Safest.

Good planning needs to use as varied a range of up to date information sources as possible and everyone involved in the trip needs to be involved in the planning. This may sound laborious but if everyone is involved, the group stands a far better chance of formulating a plan that works for all the members.

Good communication and Teamwork is also fundamental. There needs to be a culture of questioning within the group. Everyone, regardless of experience needs to be empowered to ask questions and make observations at all stages of the trip. The more experienced group members need to actively ensure this happens and no one is shouted down. If everyone is engaged, poor decision making is more likely to be exposed and can be tackled.

These simple approaches can help us to start to reduce the likelihood of us or our friends falling into Heuristic Traps with the potentially bad consequences that result.

References

Ian MacCammon, Heuristics, 2002

Colin Zacharias (Ideal, Safer, Safest)

Tom Parker Coaching, Human Factors in White Water Kayaking