An examination of the incidents occurring in sea kayaking and how coaches identify and deal with them

Gordon Brown

Independent Study summited as part of Postgraduate Diploma, Performance Coaching, University of Stirling, 2015.

Abstract

Background and Purpose

Figures obtained from the Marine and Coastguard Agency indicate that in recent years there has been a steady rise in the number of paddlers requiring assistance. It is essential that there is a better understanding of the general and common incidents that take place within sea kayaking and that coaches develop an awareness of the common triggers and patterns that enable recognition of a developing incident. The purpose of this study was 1) to find out what incidents occur within sea kayaking and if there is such a thing as commonality between incidents; 2) explore how expert coaches identify and deal with these incidents.

What was done?

Participants: Fourteen expert sea kayak coaches (12 men, 2 women) participated in the study. The coaches were all currently coaching, had more than 10 years' experience and were BCU Level 5 or aspirant coaches. The coaches were between 39 and 60 years of age (average 50 years) and had been leading at an advance level between 10 and 39 years (average 20.6 years) and coaching at an advanced level between 10 and 31 years (average 19.4 years).

Process: The coaches were asked to recall two incidents that had happened while they were on the water with a group and write a paragraph or two describing the general context; numbers in group, ability level of group, sea state, weather conditions, location etc. What the nature of the incident was, at what point they identified the developing incident and how they managed the situation after initial identification. The reports were then content analysed to determine the types and causes of incidents and the decision making process coaches employed when identifying and responding to the emerging incident.

Key findings

The common causes of incidents were:

- weather/tidal conditions
- student's lack of awareness
- equipment failure
- coaches lack of knowledge of students,

In all of the incidents a sudden and unexpected change in the weather or increasing tidal conditions was an issue. A lack of awareness shown by the students regarding the seriousness of the situation, or what was expected of them, was another contributing factor. Equipment issues were involved in twelve incidents and this ranged from hatch cover loss to complete kayak damage and subsequent loss. In ten of the incidents, the coaches indicated that they did not have adequate of knowledge of the students and their ability.

To further explore the coaches' decision making processes during the incidents the Naturalistic Decision Making (NDM) framework was used (Lipshitz, Klein, Orasanu, & Salas, 2001) and the following concepts were considered:

- Pattern Recognition – where similar components appear frequently (I have seen/heard/read about something like this before).
- Situational Analysis – the here and now of the incident (what is unfolding at present).
- Key Triggers – the tripping point or moment of realization (recognition of key information that points out the need to act and what needs to happen).
- Reference to Previous Examples – how does this compare to what I have seen/heard about?
- Option Narrowing – focusing on the solution from a range of possibilities.
- Degree of Certainty over the Situation – extent to which positive result is likely from the option chosen.

Most of the expert coaches used Pattern Recognition as a way of determining the possible outcome. This was based on many years of operating in the advanced environment and having to deal with a number of incidents. They had learned the 'language' (Klein, 1997) of probable incidents based on their Situational Analysis of similar scenarios either real, discussed, read about or previously considered. After having hypothesized about the possible outcome, they looked at the Key Triggers associated with the type of incident always referring to Previous Examples that they were aware of and this led to the Narrowing of Options, which in turn led to a Degree of Certainty over the situation.

Points of interest for coaches

The coaches had developed their decision making processes through extensive engagement in the environment and with paddlers. This engagement provided a knowledge base and skill set to 'see' an incident unfolding and be able to respond, largely, effectively. In some cases rules-of-thumb (heuristics) develop or are learnt that can augment the decision-making process by giving ready-made solutions to possible incidents (e.g., – in this situation I do X). However, there can also be traps associated with decision making based on heuristics) which can result in poor decisions. Therefore, engagement in a continuous process of re-evaluation against the possible outcomes is needed. This allows the coach to plan flexibly, become highly adaptive in their approach to problem solving, and continually fine-tune the context in which they operate.

Conclusion

Incidents do occur and coaches need to be equipped to identify and deal with them. Identifying common causes and the decision making processes employed is a starting point for coaches' preparation for incidents. Incorporating the findings from this study into coach and leader training courses may help to better equip coaches and potentially decrease the number of incidents that occur. However, the challenge for course providers is to consider how this training can take place in real conditions of wind and sea-state, with real (or perceived) consequences and not in simulated, flat water ones. Not one of the reported incidents occurred where the sea was absolutely flat.

If you would like further information on the research or to receive a copy of the full project please contact Gordon on Sea.kayak@btinternet.com or info@skyakadventures.com