Go Pro or no-no?

A brief look at the use of action cameras in Outdoor Adventure Activities

by Graham French

A quick You Tube search for 'Go Pro' will reveal a large number of videos shot with the market leader in action cams - a name that is already becoming a generic term*. Many of these, including Go Pro's own promotional material[1,2,] highlight the use of the action cam (AC) in high adrenaline, adventurous activities. It is becoming increasingly common to see ACs wielded by young people and adults engaged in adventure based learning. This article seeks to explore some of the issues around the use of ACs (of any brand) in outdoor adventurous activities, be that by the participants or the provider.

There are three main themes that I will consider in turn: publicity, ethics and safety. By no means should what follows be taken as the full story – please use the references at the end of the article to do some investigating if you want to know more.

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Action cams have an appeal in that they are easy to use, relatively affordable and allow a person to capture a first person recording of their experience. This allows them to share this experience with friends, family or the wider community, often via social networking/ video sharing sites such as Facebook or You Tube. The dangers of such social-media-total-coverage have been much discussed, but point-of-view (POV) video offers another level of exposure in the potential to put on show all aspects of an experience.

The flip side to the concerns over potentially bad experiences being published, is the promotional value that well produced films can have for a business. The images (and to some extent sound) are of such high quality that they are used by professional film makers both in the adventure sports genre[3] and the mainstream media[4]. A search on You Tube for your activity provider of choice will often reveal some action cam footage – either within the official promotional video or of a client's experiences. Many people will search for videos of a provider's activities in their selection process, so in the same way that a social media presence is considered by many an important marketing tool, an online You Tube channel or at least an official promotional video is also important. In this

* Please note other action cams are available

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action cams offer a unique method of showcasing a first person point of view of a provider's services.

Of course, associated with recording clients, particularly children, there are a host of ethical and safeguarding issues that should be considered[5]. They are not necessarily different from using ordinary video or still shots, but need careful consideration with regards to clients using their own video recording equipment – and what they do with that footage after the event. Many providers have policies on publishing images and videos on social media, but in today's instant social media sharing of experiences it is important to think though how you will regulate or utilise this opportunity. This is the Instagram generation!

So finally, to think about what many might consider the elephant in the room: safety. There can be few of us who are unaware of the tragic skiing accident involving former Formula 1 driver Michael Schumacher in 2013[6]. In the furore surrounding the investigation of how Schumacher had suffered such a serious head injury (despite wearing an approved helmet), a suspicion surfaced that it may have been the Go Pro camera and/or its associated mount that caused either the helmet to fail or the injury to be so serious despite the helmet's protection. The Go Pro action cam's possible involvement was reported in the popular press[6] and manufacturers of action cams were not forthcoming with further information about the possibility of the claims being true, other than to say that in all likelihood the mount would break away from the helmet in the event of an impact[7]. Gradually the implications of these stories filtered down to some competitive aspects of adventure sports, and at both international and local level they were quietly banned in the fear that there might be some truth to the supposed link between the mount and Schumacher's injuries. I experienced this first hand last year when competing in a local mountain bike enduro event and being asked by the start marshal to remove my camera. Interestingly it was only during the race run that the camera was not allowed – in practice sessions it was deemed ok. I have recently been challenged to consider my own policy on the use of action cams as they are very popular with the HE students with whom I work. In most groups now more than half the students have an action cam they want to use at some point. It should be noted that there has also been research in to using action cams in academic research for capturing research data that would be otherwise unavailable or very difficult to collect[5].

So, should we be concerned with the safety implications of either staff or clients using action cams (particularly those helmet mounted varieties)? Are the fears raised by Schumacher's accident realistic or was it a freak occurrence? During the summer of 2015 the BBC commissioned some research into the use of helmet mounted cameras[4] by the Transport Research Laboratory (TRL) as they had concerns over the safety of their staff using helmet mounted action cams in filming. They were specifically testing to see if the presence of an action cam and mount weakened the helmet or lessened its ability to offer the level of protection it was designed for. The report was specific in that it tested three types of helmet (hardshell, hybrid and EPS foam), and that the cameras were mounted using sticky strips or Velcro straps to the side, front and top of the helmets[8]. The testing protocols were based on those used to determine whether a helmet design meets the relevant British/EU standards for safety for the intended activity (in the test these were climbing, cycling, skateboarding and motorsport).

The findings were in contrast to the speculation that had surrounded action cams in the wake of the Schumacher accident. TRL found that in their tests the presence of a helmet mounted action cam did not reduce the effectiveness of a climbing helmet[4, 8]. Interestingly they found that in their tests the camera broke away from the helmet only about 40% of the time (contrary to manufacturers' claims), but that the impact on the mount actually absorbed some energy from the impact (in deforming the mount) and so there was less force applied directly to the helmet itself[4]. This was a completely unexpected result[8]. There were some caveats implying that glancing blows may have led to slightly more force being applied to the helmet (but not exceeding the force it is designed to withstand), and the tests dealt with impacts only. They did not cover the drag or twisting effect of a falling climber catching the camera mount on a ledge as they fall causing a twisting effect on their head/neck. The only truly negative finding from the test was regarding mounts that face back towards the user; the selfie-mount, that is effectively an arm holding the camera away from the user's head. In this case, as might be expected, impacts caused the arm to deform inwards leading to potential facial damage or skull fracture through the face[4].

The report indicates that in terms of safety there is not a significant increase in the risk of injury when using helmet mounted action cams, but it may be worth considering the other aspects discussed above before designing and deciding on an acceptable use policy for your organisation – either as a specific section to your existing video/photo policy or as a specific document for the use of action cams. ■

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