

Empirical Evaluation of Crisis Response

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Abstract

This study examines the relationship between calling for assistance and response in crisis situations. Ten distinct calls for assistance are tested in three separate situations to determine the most efficient crisis response phrase. The results of this study compel the North American populace to reconsider its current crisis response practices.

Introduction

Crisis Response, or CR science, is a branch of science dedicated to the preservation of human safety through timely response to social agonists. This historically diminished science has worked at the scientific umbra for the past century, stepping into the public spotlight in the 1930s when CR scientists developed the 'Air Raid Siren' for Allied forces, during the Second World War (Holenger, 1936). CR science has since worked globally to develop missile defence networks that 'sound' when international air security is breached, and nationally to identify 'broken arrow' missiles. With the development of micro-scale attacks like the terrorist incident of September 11, 2001, and subsequent acts of terror in Europe, the Middle East, and Asia, the need for immediate, mobile, and effective response to crises has become a top priority for CR scientists.

The two major variables surrounding crisis response efficiency are the

understood degree of urgency and the proximity of response resources to the crisis. Crisis response signalling is a dynamic convention, which relies on variation for success. The 'cried wolf' syndrome costs valuable time when disaster strikes, removing victims of violence from aid. This study evaluates the social component of response urgency, by measuring the length of time randomly selected individuals take to respond to a variety of crisis signals, as well as the number of responses within thirty seconds to the crisis, which is known as response mass.

Method

Genuine crisis response events are difficult to simulate in the laboratory, as participants in any such study are naturally sensitized to stimulus from the artificial environment, which is known to CR scientists as the Malkin effect (Malkin, 1937). To avoid the Malkin effect, this crisis response experiment is carried out in a crowded business district at lunchtime, in a parking lot

outside a grocery store on 'discount Tuesday,' and before walking time in the lobby of a legion hall. The experimental design involves having an inanimate female subject, wrapped loosely in a grey blanket, fall to the ground and generate a pre-recorded cry of alarm when the nearest possible responder is 8 meters away, as determined by a third party from an elevated location. Ten different calls for assistance are tested to determine response time and response mass. The experiment is conducted over the course of two months, at random time intervals, to control participant repetition and predictability of the crisis events. All ten calls are repeated three times (Strømmen, 2003). The ten calls for assistance are:

1. Help me.
2. I'm on fire.

3. I'm bleeding.
4. I'm dying.
5. Hilfe, Hilfe! Meine Beine sind gebrochen.
6. I've been shot.
7. Mommy!
8. I've fallen and I can't get up.
9. The end is nigh.
10. I require urgent medical attention. Please send for help.

Results

The CR time intervals ranged from eleven seconds to over nine minutes depending on the verbal crisis signal (Table 1). The standard call for help, or 'Help me' (Zemar, 1979), proved to be an effective way to obtain speedy response to crisis and obtain optimum response mass. The words 'The end is nigh' appear to be the most effective call for assistance available to the

Table 1. Summary of Response Times and Frequencies Resulting from Various Calls for Assistance

Call for Assistance	Mean Response Time (seconds)	Mean Number of Responders within 30 Seconds
<i>Help me.</i>	17.3	4
<i>I'm on fire.</i>	19.6	2
<i>I'm bleeding.</i>	25.6	1
<i>I'm dying.</i>	86.4	0
<i>Hilfe, Hilfe! Meine Beine sind gebrochen.</i>	124.2	0
<i>I've been shot.</i>	450.4	0
<i>Mommy.</i>	12.6	5
<i>I've fallen and I can't get up.</i>	560.5	0
<i>The end is nigh.</i>	11.3	7
<i>I require urgent medical attention. Please send for help.</i>	23.4	1

average citizen in an urban setting, yielding both the fastest response time and fastest response mass time. The obscure but trendy phrase 'I've fallen and I can't get up.' received poor response, perhaps due to its length and frequent abuse on popular situation comedies. Interestingly, the German phrase 'Hilfe, hilfe! Meine Beine sind gebrochen.' received poor crisis response in all cases, except near the legion hall. The responders at the legion hall were particularly agitated when exposed to the German call for help. This is believed to be an instance of reversion to war experiences, where soldiers established a knee jerk reaction to German calls of crisis. In all cases responders indicated feeling a range of discomfort ranging from acute stress to confused anxiety relating to the implied crisis.

Discussion

Standard calls for crisis response have served well in the past, and this experiment supports the use of these calls for assistance, including 'Help me,' 'Mommy,' and to a lesser extent, 'I'm on fire' for semi-urgent events. But in instances of extreme crisis, which require urgent response by the maximum number of responders, 'The end is nigh,' is the optimum call for help. The brevity, simplicity and clarity of 'The end is nigh,' as a call for help, apparently strikes a cord with a wide variety of first responders, and ensures speedy effective assistance for the person in crisis.

Armed with this knowledge, the message that 'the end is nigh' must be shared throughout the North American

populace. Initial plans to phase in crisis response education at the elementary school level, however, have been rejected due to the long implementation period. Nevertheless, information about 'the end is nigh' needs to reach the bulk of the population before another major crisis, such as that experienced on September 11, 2001, occurs again. Currently, a plan is being developed to have television newscasters, in cooperation with tele-evangelists, promote 'the end is nigh.' This will be followed by the placement of elderly spokesmen wearing sandwich boards sharing the message 'the end is nigh' on major intersections in North America, so that everyone can receive this valuable information in a timely fashion.

References

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