THE INFLUENCE OF TRUST AND CONFIDENCE ON PERCEIVED RISKS AND COOPERATION

T. C. Earle*, M. Siegrist**, H. Gutscher**

* Western Washington University, USA; ** University of Zurich, Switzerland

(Principal contact: timearle@cc.wwu.edu)

Abstract: Trust is an important factor in risk management. It affects judgments of risk and benefit; and, directly or indirectly, it affects acceptance of technologies and other forms of cooperation. There is little agreement among researchers, however, as to how trust in risk management should be studied. Many researchers seem to be atheoretical with regard to trust. Based on a comprehensive review of the trust literature we propose a "dual-mode model of social trust and confidence".

1. Introduction

Most researchers in the field of risk management agree that trust is an important factor. However, there is no consensus about the function of trust and the determinants of trust. Based on the reviewed literature we propose a dual-mode model of social trust and confidence. Our proposed model might be relevant for a better understanding of public reactions towards EMF.

1.1 Trust and Risk Perception

Most people do not have detailed knowledge about EMF. One way people cope with this lack of knowledge is to rely on social trust to reduce the complexity they are faced with (Earle & Cvetkovich, 1995; Luhmann, 1989; Siegrist & Cvetkovich, 2000). A number of studies showed that for complex technologies trust is related to perceived risks and benefits. Trust influences, for example, perception of gene technology. Trust in companies and scientists performing gene manipulation had a strong effect on the benefits and risks perceived (Siegrist, 1999, 2000). Although there is broad consensus on the importance of trust, there is no agreement among social scientists on how to conceptualize trust (Cvetkovich & Löfstedt, 1999).

1.2 Trust and Confidence

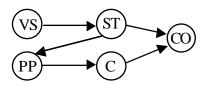
We define *trust*, in brief, as the willingness to make oneself vulnerable to another based on a judgment of similarity of intentions or values. This definition is close to that of Rousseau, Sitkin, Burt, and Camerer (1998), but here we want to emphasize that *trust* is based on social relations, group membership and shared values. The second construct is *confidence*, defined, briefly, as the belief, based on experience or evidence, that certain future events will occur as expected. Even with these brief descriptions, the key distinctions between *trust* and *confidence* are apparent: *Trust* involves risk and vulnerability, but *confidence* does not; *trust* is

based on social relations, whereas *confidence* is based on familiarity; the objects of *trust* are persons (or person-like entities), but one can have *confidence* in just about anything. *Trust* and *confidence* may interact, probably in ways that are context-specific. Both *trust* and *confidence* can contribute to various forms of cooperative behavior.

1.3 A Dual-Mode Model of Social Trust and Confidence

Our model depicted in Figure 1 entails two pathways to cooperation, one via trust, the other via confidence. The information perceived by a person is divided into two types, that which is judged to be relevant to "morality" and that which is judged relevant to "performance." (Note that here, and throughout the model, the elements represent subjective judgments, not aspects of some objective reality.) This division of information, although central in studies of impression formation (Skowronski & Carlston, 1989), has been overlooked in most studies of trust and confidence, particularly in risk management contexts. The importance of this distinction is demonstrated, first, by studies that show that persons tend to organize impressions of others along two dimensions, social desirability (morality) and intellectual desirability (performance), and, second, that morality information tends to dominate performance information (De Bruin & Van Lange, 1999a, 1999b). By "dominate" we mean that, to an observer, morality information is more important and that it conditions the interpretation of performance information. For example, given positive morality information, negative performance is judged much less harshly than it would be if the morality information were negative.

Fig. 1: Causal Model Derived from the Dual-Mode Model of Social Trust and Confidence.



Trust and confidence are separate, but, under some circumstances, interacting sources of cooperation. Trust is based on value similarity, and confidence is based on

performance. According to our model, judged value similarity (VS) between the observer's currently salient values and the values attributed to others determines social trust (ST). Thus, the basis for trust is a judgment that the person to be trusted would act as the trusting person would. That value similarity determines social trust has been shown in a number of studies (Earle & Cvetkovich, 1995, 1997; Siegrist, Cvetkovich & Roth, 2000). The interpretation of the other's performance (PP) influences confidence (C). Confidence can be based on formal record keeping, contracts, control systems or other indicators of past performance. Both social trust and confidence have an impact on people's willingness to cooperate (CO; e.g., accept electromagnetic fields or EMF in the neighborhood). One aim of our future work is to develop measures for, and to test, this model of trust and confidence in the applied context of EMF risk management. Past research has focused either on trust or on confidence. For a better understanding of social trust it is crucial to assess simultaneously the influence of trust and confidence on cooperation.

2. Conclusion

Social trust and confidence are important concepts for a better understanding of public reactions toward EMF. Past research in the field of risk management was atheoretical with regard to trust. Our dual-mode model of social trust and confidence might provide a framework to guide future research.

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