ABSTRACT

Biotechnology entrepreneurship is a relatively new and distinct field of entrepreneurship. Most current empirical research is conducted in the developed economies and cannot be directly extrapolated to the developing economies. The paucity of empirical research and the lack of a conceptual framework for biotechnology entrepreneurship constitute gaps that this research addressed through the development of a proposed theoretical framework of biotechnology entrepreneurship based on empirical research conducted within the context of the developing economies of South Africa and Brazil.

The current methodological approaches to research in biotechnology entrepreneurship predominantly make use of a nomothetic philosophical approach and employs quantitative methods. Current research is also often based on surveys conducted within one developing economy context. Consequently, few studies in biotechnology entrepreneurship use the qualitative multiple case study approach. This methodological gap is addressed in this research through the use of qualitative multiple case studies, in the idiographic philosophical tradition, in two developing economies; South Africa and Brazil. The data collection process included in-depth interviews, documents review and observations, which improved the quality of the research through data triangulation.

Ten themes were identified, which formed the basis for developing the proposed theoretical framework. In addition, seven factors that influence the process of biotechnology entrepreneurship in South Africa and Brazil were identified as regulation; funding; infrastructure; skills; entrepreneurial and commercialisation capabilities; market for biotechnology products; and social development.

This research shows that the individual-opportunity nexus of entrepreneurship does not entirely hold for biotechnology entrepreneurship in South Africa and Brazil. Instead, there is a nexus of research and development; and a government-incentivised environment that is conducive for biotechnology entrepreneurship.
The policy implications of these dynamics in South Africa and Brazil; as well as implications for the other stakeholders in the biotechnology industry are articulated as being linked to the control of the factors that influence biotechnology entrepreneurship by the various stakeholders. Hence, the implications for government are predominantly linked to regulation and infrastructure; and the implications for the other stakeholders are predominantly linked to funding and skills.