

# Abstract

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## **Deciphering Design Process: Using qualitative methods to inform collaborative built environment research**

The challenges faced by the building industry highlight the need for collaborative work between practitioners from different backgrounds. The building industry is becoming increasingly multidisciplinary. Given this context, building practitioners should be able to integrate their design processes, working methods and problem-solving techniques. Multidisciplinary design is considered fundamental in the success of building performance an aspect which is traditionally approached deterministically. This article argues that qualitative research methods are helpful to inform collaborative work between building practitioners. This paper presents previous research in the area of collaborative design and development of design aids with focus on simulation software for building energy performance. Despite the remarkable advances in this field, the development and assessment of design tools has, so far, been mostly reliant on quantitative methods and numerical approaches. It is argued that identifying the underlying principles and dynamics of building practitioners' work is likely to enhance problem-solving in project environments and inform design aid and software development research. Therefore, qualitative methods could potentially assist in deciphering the complex nature of building design. This paper introduces two research projects concerned with collaborative work between building practitioners working towards the delivery of optimised energy building solutions. It discusses the use of two qualitative methods semi-structured depth interviews (SSDI) and ethnography to formulate an understanding of collaboration in project environments. The article presents the reasons for choosing this method, reflects on the research process and discusses challenges experienced throughout. The researchers aim to highlight that the use of qualitative methods could assist the development of design aids and tools.