METHODS IN RESPONSIBLE MANAGEMENT LEARNING AND EDUCATION – A REVIEW

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ABSTRACT

The purpose of the current chapter is to examine which research methods have been employed to study RMLE phenomena and their contexts. This review allows us to determine if certain overarching approaches to generate knowledge as well as data collection and analysis tools are favored over others, which may indicate that the knowledge base created on RMLE may be stronger in some ways than in others. We also examine how research methods have been applied and provide examples of excellent applications. Our findings show that the most commonly applied overarching research approaches in RMLE are survey methodology, case studies, and content analysis. Data collection techniques predominantly include interviews, observations, survey data, and the analysis of organizational documents or archival textual data. Data analysis techniques are dominated by descriptive statistics, simple mean comparisons, and thematic analysis. Based on our review, we discuss specific challenges of RMLE research and provide recommendations for navigating these challenges in the application of specific research methods. We also provide suggestions for alternative research approaches that may prove fruitful for future RMLE research.

Keywords: Research methods; Sustainability; Responsibility; Ethics; Qualitative research methods; Quantitative Research Methods; Mixed Methods; Responsible management learning and education
METHODS IN RESPONSIBLE MANAGEMENT LEARNING AND EDUCATION – A REVIEW

The current chapter provides a review of the research methods and methodologies employed in current responsible management learning and education (RMLE) research. In general, reviewing the research methods (including data collection and analysis) of any given field is useful to determine how it has arrived at its current knowledge base. Research methods are the tools with which we explore our phenomena of interest and the contexts in which they exist. The research methods we use allow us to discover, explore, develop, examine, reflect on, assess, test, challenge, and refute knowledge. Over time, the use of research methods helps researchers create a knowledge base on a given phenomenon and the context in which it operates.

Yet, all research methods also have limitations. As McGrath (1995) discusses, all research methods are inherently flawed. Research methods are rooted in research philosophies about what exists (ontology) and how we can know what exists (epistemology). This means that employing a particular research method inherently imposes a specific lens through which a phenomenon and its context can be explored and understood. Furthermore, all research methods have strengths and weaknesses such that no one research method can fully capture a phenomenon and its context. Rather, a particular research method allows the researcher to explore certain characteristics of a phenomenon but not others or certain aspects related to how the phenomenon operates in its context but not in others. As such, the existing knowledge base on a phenomenon of interest and its context is strongly influenced by the research methods a field employs.
The purpose of the current chapter is to examine which research methods have been employed to study RMLE phenomena and their contexts. This review allows us to determine if certain tools to generate knowledge are favored over others, which may indicate that the knowledge base created on RMLE may be stronger in some ways than in others. We also examine how research methods have been applied and provide examples of excellent applications of research methods in RMLE research.

In the beginning of our chapter, we describe the method we employed to systematically review the use of research methods in RMLE research. We then report findings from our review that highlight which methods are most commonly employed. We also evaluate the current applications of these methods in RMLE research and provide specific examples for excellent applications of the method. We then discuss more generally some of the specific methodological challenges researchers face in RMLE research and offer suggestions for addressing and managing these challenges. Finally, we highlight alternative research approaches that show great promise for the future study of RMLE.

REVIEW OF RMLE METHODS

In this section, we describe the method we employed for our review of the research methods currently used in RMLE research. We also discuss the strengths and limitations of our chosen approach.

Search for Empirical Papers

For our review, we evaluated papers published over the last five years (i.e., 2013-2018) in the journals *Academy of Management Learning and Education (AMLE), Journal of Management*
Education (JME), Management Learning (ML), Management Teaching Review (MTR), and International Journal of Management Education (IJME). We limited our review to the last five years to ensure that our observations reflect the most current practices.

We chose the five journals above for several reasons. First, these journals all cover general management learning and education research, rather than more specific sub-topics, such as learning and education specifically related to leadership (e.g., Journal of Leadership Education), marketing (e.g., Journal of Marketing Education), or international business (e.g., Journal of Teaching in International Business). In this way, we ensure that we do not overrepresent particular research topics and associated research methods by reviewing published articles in journals that limit themselves to specific topics.

Second, the five chosen journals each have different research foci and serve slightly different communities of learning and education researchers. A review of their mission statements shows that AMLE focuses on the process and results of management teaching as well as the institutional environment of business schools (Academy of Management Learning & Education, 2018). JME publishes articles that “reflect changes and developments in the conceptualization, organization, and practice of management education” (Journal of Management Education, 2018). MTR publishes short teaching and learning resources (Management Teaching Review, 2018). IJME seeks to publish “reflective papers which bring together pedagogy and theories of management learning” (The International Journal of Management Education, 2018). ML “provide a unique forum for critical inquiry, innovative ideas and dialogue” (Management Learning, 2018).

Furthermore, our assertion that these journals publish different types of papers is also based on the personal experiences of the first author of this chapter. While being an Associate
Editor for AMLE, Köhler has held several workshops with Editors and Associate Editors of JME, MTR, and ML that have focused on how the journals differ in the content they publish, in the ontological and epistemological traditions in which most of their publications are rooted, and in the associated research methods that are frequently employed in the published papers. As such, in reviewing articles published in these five journals we can ensure a plurality of ontological and epistemological foundations as well as a plurality of specific approaches to research methods such as experimental research, simulations, survey research, different qualitative research methods, and many more.

Third, the five journals chosen for this review include arguably the most influential journals in MLE research. The journals are ranked consistently highly in popular publication ranking systems. Furthermore, the submission rates to these journals have increased over the last years (based on journal statistics from editorial board meetings and on personal conversations with the journals’ editors), indicating that they are a popular and respected outlet for MLE research. Consequently, our review of research methods related to RMLE research in these five journals should allow us to review the most relevant methods for RMLE researchers.

In order to search for articles published on RMLE topics in these five journals, we used the following search terms: sustainab* (which finds all matches related to this word stem, such as sustainability, sustainable, sustainably, and other words with the same word stem), ethic* (i.e., ethics, ethical, ethically, business ethics, ethic, etc.), and responsib* (i.e., responsibility, corporate social responsibility, responsibly, responsibly, etc.). Table 1 lists the initial search hits produced by the use of these search terms.

---------------------------------------insert Table 1 here---------------------------------------
**Inclusion Criteria**

To be included in our review, an article had to meet several inclusion criteria. First, the article had to be a research piece on RMLE topics. For example, several articles might have included the word “responsible,” but the use of the word was not related to responsible management learning and education. It might have been used in the sense of a manager being responsible for her or his employees or an antecedent being responsible for a certain effect. Similarly, an article may have included the word “sustainable” but only to say that certain teaching practices were not sustainable over the course of a semester. To be included in our review, an article’s main research topic had to be either a topic related to communicating learning content on sustainability, responsibility, or ethics or a topic related to teaching and educating in a responsible, sustainable, or ethical way.

Second, the article had to include an empirical component, i.e., a data collection and analysis. Conceptual, anecdotal, editorial, or opinion pieces were not included in our review. Consequently, our review included 11 papers from AMLE, 17 papers from JME, 0 papers from MTR (no empirical data was found in any of the RMLE studies we assessed in MTR), 19 papers from ML, and 18 papers from IJME.

**Coding Approach**

From each of the included articles we coded the following information about the employed research methods:
- Journal
- Publication year
- Did the paper follow a qualitative, quantitative, mixed method or other approach?
- Was the paper related to communicating RMLE content or related to RMLE as a characteristic of the educational experience?
- General approach employed (qualitative: e.g., grounded theory, case study analysis, ethnography, action research; quantitative: e.g., survey methodology, experiment, archival, vignette study)
- Data collection approach (qualitative: e.g., interviews, observations, artifacts, field notes; quantitative: e.g., panel survey, longitudinal measurement, repeated measures, archival data)
- Data analysis approach (qualitative: e.g., thematic analysis, discursive analysis, content analysis, grounded theory coding; quantitative: e.g., descriptive statistics, t-test, ANOVA, regression, SEM, HLM, social networks analysis)

For papers using a different approach than we would usually classify in the management discipline as quantitative, qualitative, or mixed method we collected all available information about the employed method. Table 2 presents the articles we coded and our coding decisions.

---------------------------------------insert Table 2 here----------------------------------

FINDINGS
Over the last 5 years, we found 65 empirical articles in 5 journals, out of which we classified 10 as quantitative, 39 as qualitative, 15 employed some form of mixed methods, and 1 paper used another type of approach not commonly captured under these prior approaches.

**Quantitative**

Amongst the 10 papers using quantitative approaches, 9 papers used a survey approach. Out of these 9 survey papers, six used one-time measurement, 1 used measures at different points in time, and 3 used repeated measurement (note: some papers featured multiple data collections). In addition to using a survey approach, the paper by Rasche et al. (2013) also featured a longitudinal design, the paper by Klapper et al (2016) a quasi-experimental design, and the paper by Koris et al. (2017) used vignettes as stimulus material. The one quantitative paper that did not use a survey (Décamps et al., 2017) introduced the Sustainability Literacy Test platform (to demonstrate how higher education institutions can evaluate their sustainability teaching and learning) and reported statistics on sustainability literacy worldwide at present time. For data analysis, 3 papers used SEM or path modeling, 3 papers used t-tests, 2 papers used regression techniques, 2 papers used only descriptive statistics, 1 paper used factor analysis, and 1 paper used ANOVA techniques (note: Some papers used several techniques).

**Qualitative**

Amongst the 39 papers using a qualitative approach, 18 papers employed a case study analysis approach, 3 papers a grounded theory approach, 4 papers a narrative approach, 4 papers discourse analysis, 8 papers a content analysis approach, 4 papers an action research approach, and 3 papers an ethnographic approach (again, several papers combined multiple approaches). Data collection means included interviews (15 papers), focus groups (2 papers), observations (14
papers), surveys (9 papers), other documents or archival textual data (18 papers), non-textual data (e.g., photos; 4 papers), co-created materials (4 papers), personal reflections (2 papers), field notes (3 papers), journaling (3 papers), and vignettes (1 paper). Data in the qualitative papers were analyzed using thematic analysis (15 papers), analysis of discursive practices (5 papers), narrative analysis (4 papers), visual semiotic analysis (1 paper), grounded theory analysis (5 papers), inductive coding (2 papers), critical incident analysis (1 paper), interpretive analysis (1 paper), and reflective conversations (1 paper).

**Mixed and Other**

Amongst the mixed methods papers, 5 papers used a case study approach, 11 papers a content analysis approach, 13 papers a survey approach (with 1 longitudinal design among them), 1 paper a vignette study, and 1 paper student assessments. The data collection of these papers included surveys (13 papers with one-time measurement, 1 with repeated measures), interviews (3 papers), and the analysis of other documents or archival textual data (9 papers). Data analysis techniques included thematic analysis (11 papers), narrative analysis (3 papers), content analysis (3 papers), fuzzy set qualitative comparative analysis (1 paper), descriptive statistics as the dominant technique (11 papers), ANOVA/MANOVA (3 papers), t-tests (3 papers), other non-linear comparison tests (1 paper), and cluster analysis (1 paper).

We only found one paper that used a different approach than we would usually classify in the management discipline as quantitative, qualitative, or mixed method. The paper by Cummings and Bridgman (2016) created geographical maps using an algorithm into which textual data was fed. They also used a narrative textbook review as well as publication analyses.
As such, the most commonly employed techniques that we see in RMLE research are survey methodology, case study analysis, and content analysis of textual data. Quantitative data analysis techniques focus predominantly on descriptive statistics and some of the simpler mean comparison techniques. Qualitative data analysis techniques predominantly favor thematic analysis. In the following, we will highlight four example papers that have used different methods to examine their research questions. We chose these articles because of the demonstrated fit between the research question posed and the research method applied, which allowed each author team to address interesting research questions and uncover new knowledge.

**Examples of Different Research Method Applications**

Employing a qualitative multiple-case study analysis approach, Hanson et al. (2017) examine students’ moral development across three different cultural contexts (USA, Morocco, and Brazil). The researchers adopted a constructionist epistemology in which they explored moral beliefs as being “created, altered, and affirmed in their daily experiences within the communities in which they are embedded” (Hanson et al., 2017, p. 396). Of specific interest to the researchers was how students’ interactions with their institutions shaped their moral development process. Using triangulation in data collection (surveys, observations, artifacts, and interviews) and data analysis (coding notes, field notes, prolonged researcher engagement, member checks, the use of multiple coders, within-and across-case analysis), the authors were able to draw strong inferences about the model of moral development they were re-examining. Their study allowed them to confirm several dimensions of their theoretical model, modify two of the original dimensions, and add another influence factor to the model. In this paper, the case study approach was used very effectively for model elaboration and extension.
Gherardi and Rodeschini (2016) employed an ethnographic approach to study caring. Using a post-humanist approach to explore the practice of caring as an organizational competence, the authors conducted ethnographic field work in a nursing home for the elderly. The authors analyzed data from interviews, observations, prolonged field exposure, and official documents via a grounded theory approach focusing on critical incidents (i.e., “an emotional event in the life of a person or an organization in that it is a period of intense feelings;” Gherardi & Rodeschini, 2016, p. 272). Core insights from this research uncovered caring to be a common orientation of actors that is collectively performed, encoded in practices, and adapted through situated decision-making. The paper is a great example of the opportunities that ethnographic studies can provide for studying ethical decision-making and the enactment of responsible practices.

Adopting a quantitative survey approach, Roberts et al. (2018) developed an integrated moral conviction theory of student academic dishonesty. Drawing on models and concepts of moral philosophies, moral identity, and moral conviction, the authors propose multiple paths through which moral conviction may affect unethical decision-making among students. The authors collected survey data from undergraduate business students on the measures of moral conviction, moral identity, moral philosophy, moral disengagement and unethical decision-making. Based on the results of a confirmatory factor analysis and structural equation modelling, the research confirms moral conviction as a key factor that reduces student moral disengagement and unethical decision making. This paper illustrates how quantitative modelling can be applied to examine factors that predict (un)ethical decision making.

In their mixed-methods study, Beddewela, Warin, Hesselden, and Coslet (2017) examined staff and students views on responsible management education (RME) and
deficiencies in the existing curriculum. The authors used a three-phase data collection approach, which combined qualitative data from two business faculty workshops aimed at targeting a list of terms faculty associate with RME, qualitative data from a document analysis of the existing curriculum (e.g., syllabi, course descriptions, etc.), and quantitative data from a student survey. Results from thematic analysis and descriptive statistics revealed that while some faculty and student perceptions aligned, for example, with regard to the need of a more wide-spread and systematic incorporation of RME into the program’s curriculum, some perceptions differed widely, for example, with regard to the importance of RME to students. Faculty members thought that students were less enthusiastic about RME, while students reported that RME weighs strongly in their consideration of program quality and choice. From their findings, the authors conclude that effective responsible management education requires business school-wide support.

In the next section, we discuss specific challenges that arise from the study of the three reviewed research topics in RMLE, i.e., ethics, sustainability, and responsibility. We review how current papers have addressed these challenges when selecting and applying specific research methods. In addition, we make some alternative suggestions for future RMLE work.

UNIQUE CHALLENGES OF THE RMLE CONTEXT

Studying research topics grounded in ethics, sustainability, and responsibility poses some specific challenges on the research methods being employed. Furthermore, there are specific challenges arising out of the two main research purposes, i.e., RMLE as content to be taught versus RMLE as a characteristic of the educational experience.
Teaching RMLE Content

Authors are often interested in an evaluation of the effectiveness of their approach for teaching RMLE content. Much of the published research we reviewed for this chapter highlights, though, that the teaching of RMLE content goes beyond teaching declarative, tangible knowledge. Rather, teaching RMLE content often involves, among other things, instilling moral values, changing existing beliefs and behavioral patterns, becoming aware of taken-for-granted thought patterns, and challenging one’s own identity. On the one hand, these are complex topics to teach that require innovative learning approaches. Furthermore, when it comes to research methods, authors also need to take into account specific characteristics inherent in assessing these learning contexts.

In the papers we reviewed, it was noticeable that the number of qualitative studies far outweighed the number of quantitative studies (by about 4 to 1). It seems that authors consider qualitative work to be much more suitable to the research topic and context in RMLE. A closer look at the unique challenges presented in RMLE research may explain why. As mentioned in the previous paragraph, the teaching content chosen is complex. For example, changing values or morals to foster responsible and sustainable leadership or developing an ethical identity are topics that are hard to capture in a survey for two reasons.

First, the concepts themselves are hard to assess with static survey questions. Morals and values are malleable, and students may not assign the same meaning to them. As such, asking pre-worded questions about them negates the importance of the sense-making process that students may engage in when being taught about morals and values. Second, if the process of changing morals, values, or identities is of interest to the researcher, then the research method needs to be able to account for the fact that learning trajectories may differ between individuals.
It also needs to accommodate that learning rarely unfolds in a linear process (Wright & Gilmore, 2012). As such, a research method needs to be able to capture dynamic change over time. Qualitative methods are uniquely qualified to cater to these requirements, especially methods that explore and uncover patterns alongside the research participants.

Along these lines, it is noteworthy that several of the qualitative papers that focus on teaching RMLE content have used action research approaches (García-Rosell, 2013; Gearty et al., 2015; Page et al., 2014; Warwick et al., 2017), ethnography (Gherardi & Rodeschini, 2016; Mangan et al. 2016), grounded theory (Montiel et al., 2018; Sutherland et al., 2015; Toubiana, 2014), narrative analysis (Deer & Zaretsky, 2017; Kassinis & Panayiotou, 2017; Tyran, 2017; Warhurst & Black, 2017), or discourse analysis (Heizmann & Liu, 2018; García-Rosell, 2013; Louw, 2015). All of these approaches focus in one way or another on the lived experiences of the participants, their sense-making processes, development over time, and the importance of context (physical context or relevant relationships and interactions) for said development. Furthermore, many of these approaches are rooted in epistemologies that assume the subjectivity of participants’ experiences and focus on how experiences, sense-making, meaning-making, and identities are created. These include social constructionism, social constructivism, critical realism, interpretivism, and phenomenology.

If researchers are interested in RMLE research questions and don’t expect change in the underlying construct specification of the main construct over time, then researchers may want to consider using quantitative techniques that can assess different learning trajectories, such as hierarchical linear modeling or time series analysis. For example, if the research question was to determine the most effective method to deliver knowledge surrounding sustainability or to increase engagement in sustainable practices, then researchers could administer different
instructional techniques in different classes (i.e., a nested design) and compare the learning curve slopes over time. Hierarchical linear modeling should be of interest to MLE researchers as they could use it to compare the effectiveness of different instructional designs administered to different groups of students. Time series analysis could be of interest to assess how learning unfolds, i.e., how the students’ standing on the construct of interest changes over time. This type of data collection requires multiple measurement points at equally-spaced time intervals and strives to learn about the nature of a phenomenon by understanding how it changes over time.

Generally, these types of quantitative research are still rare in RMLE research (and more generally in learning and teaching research) but could be very valuable in assessing the value of different teaching techniques. The construct complexity in RMLE research, though, often makes the use of quantitative techniques difficult. Before quantitative techniques can be used more widely, we need to arrive at more appropriate and stable construct specifications, which may be very difficult if we know that constructs are malleable, subjective, and fickle.

Beyond the complexity of the chosen topic, RMLE research topics are challenging because they deal with potentially sensitive issues, such as discovering that one is not being as ethical, sustainable, or responsible as one thought. Sensitive topics can bring with them a whole range of psychological adjustments, distortions, and coping mechanisms to ameliorate the negative conclusions we may draw about ourselves. For example, we may engage in some form of positivity bias or self-deception (Goleman, 1996) to maintain an image that we are not as bad as we may have to conclude from a particular learning experience. Or we respond to questions on a survey in a way that is influenced by social desirability, i.e., we may acknowledge we are not the ethical or sustainable posterchild, but we do not want others to know that or judge us for it. In these cases, qualitative research that follows the participant over time can again be quite
useful. On the one hand, researchers can specifically explore self-deception or social desirability biases. Beyond procedures in survey research that may statistically correct for such biases to create data that is assumed to be largely free from its influence, qualitative work allows the researcher to explore why participants engage in these behaviors. Insights from such explorations may be particularly helpful to understand obstacles to learning and identity development.

Finally, many of the papers we reviewed have highlighted the importance of introducing reflexivity and reflection activities in their research on teaching RMLE content, including reflexivity of the researcher, i.e., reflexivity as a characteristic of the research approach. Through reflections, students observe, analyze, and reconsider different interpretations of their evaluations of a given situation. In order to change something as deeply rooted as values, morals, beliefs, or identities, deep reflection is often necessary (Hibbert & Cunliffe, 2015; Mirvis, 2008). Assessing this reflection process can provide important insights to researchers about appropriate teaching content, stimuli for initiating reflection, or offering assistance for reflection (Sutherland, Gosling, & Jelinek, 2015; Tomkins & Ulus, 2015, 2016).

RMLE as Characteristic of the Educational Experience

Many of the studies on RMLE as a characteristic of the educational experience focus on business schools’ implementation of the UN’s PRME principles to increase business schools’ positive societal impact. Others focus on issues with student cheating or the influence of student organizations on students’ moral development. The predominant research methods used for studies on educational experiences were case study analyses followed by surveys and content analysis. Many of the studies included analyses of business curricula, business school websites,
or textual data from reports. The survey studies gathered data directly from different stakeholders such as students, business school faculty, or career services staff.

When using secondary data, researchers face the challenge that they often do not have access to the thought processes involved in creating the secondary data. For example, when analyzing business school curricula across different business schools, researchers are often not privy to the decision-making processes underlying what was included in the curriculum and what was not. When studying PRME reports, researchers do not know if information was strategically left out of the report or if some aspects were worded a bit more optimistically than maybe warranted. In short, when studying secondary data, researchers must rely on the edited nature of the content they are analyzing. We can argue that this is likely going to be true for all business schools and thus, would ensure that we are still comparing like with like. However, this also means that we would never get the full picture of how business schools incorporate RMLE-related characteristics into their organizational and educational context.

When collecting primary data, for example, through surveys or interviews, researchers essentially face many of the same issues related to social desirability, self-deception, or the discussion of sensitive issues as outlined above. Furthermore, in order to rigorously carry out a survey research project, statistical power for running analyses needs to be strong. In the published studies, many of the surveys had a couple of hundred participants. However, practically none of the papers examined issues with the base rate of the behavior they were trying to assess. For example, if cheating practices are the topic of research, we have to take into account first how prevalent cheating is. If cheating is not prevalent in the data, then power for finding relationships between cheating and other variables of interest may be low.
Alternative Research Methods

To address unique challenges of RMLE research, we suggest a few specific research contexts and their associated methods. These may better allow for an assessment of how to teach RMLE content and how to create educational experiences anchored in RMLE.

The first research context relates to the use of games or simulations to teach RMLE content. Games and simulations are not just the teaching approach, but also an approach to research. Games and simulations have the advantage that students get experiential learning while being in a controlled environment (Fischlmayr, Lainema, & Saarinen, 2013). Many business simulations include ethical decision-making or decision-making under difficult conditions. This means that students can experience RMLE content in a research context that is akin to a quasi-experimental setting, in which instructors can manipulate aspects of the simulation or the context to foster specific learning. At the same time, by creating certain contexts and situations, researchers can study RMLE-related issues in a more targeted fashion.

An interesting example is the ViBu simulation (Köhler et al., 2013), where teams of students work together as either part of a company that produces medical equipment or as part of a sub-producer company that produces parts for the medical equipment. In a simulated market place, students in the sub-producer teams have to ensure the continuation of their production process and offer their products to the medical company. They are in competition with other sub-producer teams that are also negotiating deals with the medical company. Research using the simulation has shown that student teams often engage in unethical practices as they are competing with other teams (e.g., Fischlmayr, Lähteenmäki, & Saarinen, 2007). In some simulations, teams hacked the simulation of other teams to run the other team’s company into
financial loss, so their own company could prosper. In other simulations, sub-producer teams colluded to create an alliance against the medical company to control price in the market.

Experiences such as these lend themselves to investigation of learning from and in difficult decisions. Rather than relying on students’ previous experiences or the general context of their classes, simulations and games can be used to replicate contexts that foster questionable behaviors. In that way, researchers can more specifically study how students learn RMLE content and develop ethical, responsible, and sustainable mindsets and decision-making. In this context, qualitative research methods can be used to observe and track the students’ learning process, especially when simulations are used in conjunction with student reflections on their learning experiences. Quantitative research methods could be employed, for example, using a quasi-experimental design, in which different student groups might be set up to isolate demographic or context factors and explore how they affect students’ engagement in questionable practices. Students could then learn about these factors and how they impact on their decision-making.

As a note of caution though, we would like to remind researchers about the importance of researcher and instructor reflexivity about the learning process in these type of learning contexts. As Forray and Lund-Dean (Wright, Forray, & Lund-Dean, in press) have argued, many learning experiences like the one suggested here may be potentially challenging for students to process as they make students aware of their own susceptibility for practicing unethical behaviors. In addition, there may be unintended challenges to the students’ identity and self-perception that instructors need to be prepared to manage and ameliorate. Thorough debriefing is necessary under such conditions to ensure the ethical treatment of research participants.
The second alternative research context we would like to highlight is real-life engagement projects, in which students engage directly with organizations, such as service learning projects or student consultancies. Prior research has shown that engagement projects can be highly effective in teaching students about RMLE content in a relevant context. Furthermore, by anchoring students’ learning in real-life settings that are often designed to have a positive impact on the engaged stakeholders, instructors also achieve RMLE as a characteristic of the educational experience. In many of these learning contexts, students create “good” with their engaged partners and experience first-hand the challenges of responsible, ethical, and sustainable management. Furthermore, they are encouraged to find real solutions.

Different types of research questions could be explored in these contexts. In-depth qualitative research methods, for instance, allow researchers to examine the students’ sense-making and learning. Prior service learning projects have used qualitative approaches such as content analysis of learning narratives (e.g., Pless, Maak, & Stahl, 2011) or case study analysis of specific projects, their unique settings, and the learning generated by them (e.g., Brower, 2011; Smith & Woodworth, 2012). Quantitative research methods, such as regression or ANOVA techniques (especially those employing longitudinal designs), might be used to assess the benefits of institutionalizing service learning in a given curriculum. Researchers could, for example, assess whether a curriculum that incorporates service learning projects increases beneficial collaborations with industry partners, increases student employability, helps improve community issues, develops core student learning outcomes, or increases the attractiveness of their programs to new student cohorts (e.g., Beddewela et a., 2017; Simons & Cleary, 2006; Yorio & Ye, 2012).
CONCLUSION

This chapter reviewed the research methods currently employed by researchers studying RMLE topics related to ethics, sustainability, and responsibility. The most common research methods employed were case study analysis, content analysis of textual data and survey methodology. Quantitative data analysis techniques focus predominantly on descriptive statistics and some of the simpler mean comparison techniques. Qualitative data analysis techniques predominantly favor thematic analysis. Our review indicated that qualitative studies outnumbered quantitative studies by 4 to 1. This indicates a strong preference for qualitative work that accounts for the complexity of the topics studied, captures dynamic change and differences in sense-making and meaning-making, and explores the important role of context. Furthermore, we discussed alternative research approaches of games, simulations, service-learning, and student consultancies that may offer interesting and valuable opportunities for studying RMLE topics in future research.
REFERENCES


**References for Research Methods Coding**

**AMLE coding**


**ML coding**


Dwyer, G., & Hardy, C. (2016). We have not lived long enough: Sensemaking and learning from bushfire in Australia. *Management Learning, 47*(1), 45-64. doi:10.1177/1350507615577047


**JME coding**


**IJME coding**


Table 1. Overview of search results using the selected keywords

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<th>Sustainab*</th>
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<td>General research method used</td>
<td>Data collection approach</td>
<td>Data analysis approach</td>
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<td>Arieli, Sagiv, &amp; Cohen-Shalem (2016)</td>
<td>content</td>
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<td>Survey; Documents and other archival data</td>
<td>Content analysis; MANOVA; t-test</td>
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<td>AMLE</td>
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<td>Maps; textbook analysis; descriptive statistic; content coding</td>
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<td>Interviews, Observations, Survey</td>
<td>Thematic analysis</td>
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<td>AMLE</td>
<td>Hanson et al. (2017)</td>
<td>content</td>
<td>Qual case study</td>
<td>Interviews, Observations, Survey, Documents, Field notes</td>
<td>Grounded theory</td>
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<td>AMLE</td>
<td>Montiel, Antolin-Lopez, &amp; Gallo (2018)</td>
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<td>Qualitative</td>
<td>Documents</td>
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<td>AMLE</td>
<td>Rasche, Gilbert, &amp; Schedel (2013)</td>
<td>content</td>
<td>Quant survey</td>
<td>Survey- repeated measurement; longitudinal measurement; textual data</td>
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<td>AMLE</td>
<td>Snelson-Powell, Grosvold, &amp; Millington (2016)</td>
<td>ed. experience</td>
<td>Mixed methods- case study; survey; longitudinal study</td>
<td>Survey interviews; Documents and other archival data</td>
<td>Content analysis; fs/QCA; descriptive statistics</td>
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<td>AMLE</td>
<td>Sutherland, Gosling, &amp; Jelinek (2015)</td>
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<td>Interviews, Observations</td>
<td>Grounded theory</td>
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<tr>
<td>IJME</td>
<td>Annan-Diab &amp; Molinari (2017)</td>
<td>content</td>
<td>Qualitative case study (limited information on data collection and analysis)</td>
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<tr>
<td>IJME</td>
<td>Awayesheh &amp; Bonfiglio (2017)</td>
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<td>Beddewela, Warin, Hesselden, &amp; Coslet (2017)</td>
<td>Content AND ed. experience</td>
<td>Mixed methods (case study)</td>
<td>Survey; documents and other archival data; Thematic analysis; descriptive statistics</td>
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<td>IJME</td>
<td>Borges et al. (2017)</td>
<td>ed. experience</td>
<td>Mixed-methods (content coding; survey)</td>
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<td>Content analysis; descriptive statistics (count of comments)</td>
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<td>Borges, Ferreira, de Oliveira, Macini, &amp; Caldana (2017)</td>
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<td>Questionnaire</td>
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<td>IJME</td>
<td>Burga, Leblanc &amp; Rezania (2017)</td>
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<td>IJME</td>
<td>Carreira, Aguiar, Onça, &amp; Monzoni (2017)</td>
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<td>Cicmil, Gough &amp; Hills (2017)</td>
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<td>Qualitative case study</td>
<td>Observation</td>
<td>Thematic analysis</td>
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<td>IJME</td>
<td>Décamps, Barbat, Carteron, Hands, &amp; Parkes (2017)</td>
<td>content</td>
<td>Introduces Sulitest as a method to assess sustainability learning</td>
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<td>Greenberg et al. (2017)</td>
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<td>Narrative analysis; descriptive statistics (no actual description of data analysis process)</td>
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<td>IJME</td>
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<td>Klapper &amp; Farber (2016)</td>
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<td>Quantitative survey</td>
<td>Survey- repeated measurement; quasi-experiment</td>
<td>Saturated model specification test</td>
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<td>IJME</td>
<td>Kolb, Fröhlich, &amp; Schmidpeter (2017)</td>
<td>content AND ed. experience</td>
<td>Qualitative case study (claims to be mixed-methods, but no info on quantitative)</td>
<td>Documents and other archival data</td>
<td>More of description than analysis</td>
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<td>IJME</td>
<td>Ortiz &amp; Huber-Heim (2017)</td>
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<td>Rive, Bonnet, Parmentier, Pelazzo-Plat, &amp; Pignet-Fall (2017)</td>
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<td>Documents and other archival data</td>
<td>Description rather than analysis</td>
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<td>IJME</td>
<td>Ross, Valenzuela, Intindola, &amp; Flinchbaugh (2017)</td>
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<td>Mixed methods (content analysis and survey)</td>
<td>Survey; documents and other archival data</td>
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<td>Content Type</td>
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<td>Tyran (2017)</td>
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<td>Narrative analysis (limited)</td>
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<td>IJME</td>
<td>Warwick, Wyness, &amp; Conway (2017)</td>
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<td>Interviews; focus groups; observations</td>
<td>Thematic analysis</td>
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<tr>
<td>ML</td>
<td>Burchell, Kennedy, &amp; Murray (2015)</td>
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<td>Mixed-methods (case study; survey)</td>
<td>Survey; interviews</td>
<td>Thematic analysis; descriptive statistics</td>
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<td>ML</td>
<td>Crevani &amp; Hallin (2017)</td>
<td>content</td>
<td>Qualitative case study</td>
<td>Interviews; observations; documents and other archival data; non-textual data; co-creating or interaction; journaling</td>
<td>Inductive coding</td>
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<tr>
<td>ML</td>
<td>Dwyer &amp; Hardy (2016)</td>
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<td>García-Rosell (2013)</td>
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<td>Gearty, Bradbury-Huang, &amp; Reason (2015)</td>
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<td>Interviews; co-creating or interaction</td>
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<td>ML</td>
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<td>Narrative analysis; visual semiotic analysis</td>
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<td>Kassinis &amp; Panayiotou (2017)</td>
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<td>Narrative analysis; visual semiotic analysis</td>
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<td>ML</td>
<td>Koris, Ortenblad, &amp; Ojala (2017)</td>
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<td>Mangan, Kelemen, &amp; Moffat (2016)</td>
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<td>Qualitative case study (Autoethnography)</td>
<td>Focus groups; personal reflections; field notes; journaling</td>
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<td>Millar &amp; Price (2018)</td>
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<td>ML</td>
<td>Page, Grisoni, &amp; Turner (2014)</td>
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<td>Qualitative action research</td>
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<td>ML</td>
<td>Porschitz, Smircich, &amp; Calás (2016)</td>
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<td>Smolović Jones, Smolović Jones, Winchester, &amp; Grint (2016)</td>
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<td>JME</td>
<td>Bergman, Westerman, Bergman, Westerman, &amp; Daly (2014)</td>
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<td>Survey</td>
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<td>Bruni-Bossio &amp; Willness (2016)</td>
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<td>JME</td>
<td>Deer &amp; Zarestky (2017)</td>
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<td>Huster, Petrillo, O’Malley, Glassman, Rush, &amp; Wasserheit (2017)</td>
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<td>JME</td>
<td>Kuechler &amp; Stedham (2018)</td>
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<td>Ledley &amp; Holt (2014)</td>
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<td>JME</td>
<td>Lou (2015)</td>
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<td>Discourse analysis</td>
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<td>JME</td>
<td>O’Brien, Wittmer &amp; Ebrahimi (2017)</td>
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<td>Rennie, Byrum, Tidwell &amp; Chitkara (2018)</td>
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<td>Interviews; Documents and other archival data</td>
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<td>JME</td>
<td>Roberts et al. (2018)</td>
<td>content AND ed. experience</td>
<td>Quantitative survey</td>
<td>SEM/ path modelling; EFA/CFÂ/PCA; t-test (post-hoc)</td>
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<td>Tomlin, Metzger, Bradley-Geist &amp; Gonzalez-Padron (2017)</td>
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<td>Vidal, Smith &amp; Spetic (2015)</td>
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<td>Mixed-methods (content analysis; survey)</td>
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<td>JME</td>
<td>Volkema &amp; Kapoutsis (2016)</td>
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<td>Walker (2018)</td>
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<td>Quantitative survey</td>
<td>Survey</td>
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</table>

Regression
BIOGRAPHICAL STATEMENTS

**Tine Köhler** is Associate Professor for International Management at the University of Melbourne, Australia. Her research interests include global teamwork, the management of cross-cultural differences in norms, communication, and coordination, trust, and qualitative and quantitative research methods. Her methodological areas of expertise specifically revolve around quantitative methods including regression, meta-analysis, and research design, as well as qualitative methods including grounded theory, case study analysis, ethnography, and interviewing. She serves as an Associate Editor for *Organizational Research Methods* and was previously an Associate Editor for *Academy of Management Learning and Education*. She further serves on the editorial boards of *Journal of Management Studies*, *Journal of Management Education*, *Academy of Management Learning and Education*, and *Small Group Research*. Her work has appeared in *Organizational Research Methods*, the *Journal of International Business Studies*, *Journal of Management*, *Academy of Management Learning and Education*, *Human Resource Management*, *International Journal of Human Resource Management*, and *Small Group Research*.

**Jennifer Hui-Han Gao** is Lecturer at the Department of Management and Marketing, The University of Melbourne. She received her PhD in Management from The University of Auckland. Her research interests include human resource management, culture effects on HRM, work and careers, and development in East Asia. She has also completed a global dairy industry research project for the International Union of Foodworkers. Her research publications have appeared in *The International Journal of Human Resource Management* and *R&D Management*.
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Köhler, T; Gao, J

Title:
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