



Theoretical Development and Empirical Examination of a Three-Roles Model of Responsible Leadership

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Abstract

This article develops theory on responsible leadership based on a model involving three leadership roles: an expert who displays organizational expertise, a facilitator who cares for and motivates employees and a citizen who considers the consequences of her or his decisions for society. It draws on previous responsible leadership research, stakeholder theory and theories of behavioral complexity to conceptualize the roles model of responsible leadership. Responsible leadership is positioned as a concept that requires leaders to show behavioral complexity in addressing all three roles. In three studies, we provide a first empirical test of antecedents and outcomes of the roles model of responsible leadership. The results of the studies indicate that responsible leadership is positively related to the leader's perceived effectiveness, favorable stakeholder evaluations and employee engagement with the organization and society. Responsible leadership behavior, in turn, seems to be facilitated by leader empathy, positive affect and universal value orientation.

Keywords Responsible leadership · Stakeholder engagement · Leadership complexity · Micro-foundation of CSR · Leader effectiveness

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Business leaders are faced with increasing stakeholder complexity. This becomes especially evident in the diverse stakeholder expectations with regard to what responsible business behavior is or should be (Maak and Pless 2006; Scherer et al. 2013; Waldman and Siegel 2008). For instance, shareholders usually expect responsible behavior to result in the effective allocation of firm resources to maximize profits; employees expect their supervisors to treat them with respect and to provide a good work-life balance; and the community regards as responsible those organizations that give back to the community and do not harm the environment.

Researchers have recognized the relevance of treating leadership responsibility systematically from a scholarly point of view and have started to conceptualize what it means to be responsible in today's global business environment (Maak and Pless 2006, 2009; Miska and Mendenhall 2018; Pless et al. 2012; Stahl and Sully de Luque 2014; Waldman and Siegel 2008). The common denominator in conceptualizations and definitions of responsible leadership is accountability to different stakeholder groups (Doh and Quigley 2014; Maak and Pless 2006; Waldman and Galvin 2008). However, apart from referring to "integrative behavior" (Maak et al. 2016; Pless et al. 2012), current research has not yet sufficiently explicated the specific responsible

leadership behaviors that would correspond to the complexity of stakeholder demands.

Moreover, with a few exceptions (Doh et al. 2011; Haque et al. 2017; Voegtlin 2011), there is no empirical test of the antecedents and outcomes of responsible leadership. The only other empirical research that might be related to responsible leadership is that linking leadership to corporate social responsibility (CSR) or investigating the influence of leaders' social responsibility (Chin et al. 2013; De Hoogh and Den Hartog 2008; Waldman et al. 2006). There is also some overlap with servant leadership, which includes the notion of stewardship as part of the servant leadership construct (Sendjaya et al. 2008; van Dierendonck and Nuijten 2011). However, these studies do not understand leadership through accountability toward stakeholders.

To the best of our knowledge, no research has yet developed and tested a comprehensive, multi-dimensional conceptualization of responsible leadership to arrive at a more holistic understanding of its drivers and implications. Doh et al. (2011) assess responsible leadership as an organizational-level phenomenon comprising the dimensions of stakeholder culture, HR practices and managerial support. The same measurement was also used by Haque et al. (2017). A study by Voegtlin (2011), which develops a measure of responsible leadership, is based on a procedural understanding of leadership as respectful engagement with stakeholders and does not fully reflect the variety of responsibilities associated with the role.

Our article therefore provides three main contributions. First, we develop theory about responsible leadership by proposing a multi-dimensional roles model that mirrors the complexities of leadership in responding to the expectations of diverse stakeholder groups. We use the term "roles model" because it reflects the various obligations associated with the roles of a leader in a business organization and the correspondingly heterogeneous accountability to stakeholders that leaders might perceive in their role (Biddle 1986; Maak and Pless 2006; Merton 1957). To develop specific roles that reflect the diversity of leadership accountability in business corporations, we draw on responsible leadership research (Maak and Pless 2006, 2009; Patzer et al. 2018; Pless et al. 2012) and stakeholder theory (Donaldson and Preston 1995; Freeman 1984). More specifically, we distinguish between the roles of the responsible leader as an expert who tries to achieve organizational performance goals, as a facilitator who cares for her or his followers and as a citizen who considers the consequences of business decisions for society and the environment.

Our second contribution is in explaining how responsible leaders can cope with the increasing complexity of stakeholder expectations. We suggest that leaders who can display higher behavioral complexity by performing multiple roles simultaneously are better able to respond to

growing stakeholder complexity. Such leaders would not choose either/or solutions that prioritize some stakeholder demands over others but would be able to develop both/and solutions to conflicting demands (Denison et al. 1995; Zhang et al. 2015). The article thus also contributes to research on the behavioral complexity of leaders (Denison et al. 1995; Hooijberg et al. 1997) in that it adds concern for society and the environment as an important aspect of a behaviorally complex leader.

Finally, the article contributes to our empirical knowledge about responsible leadership by providing one of the first studies to test antecedents and outcomes of responsible leadership.

Theoretical Development of a Three-Roles Model of Responsible Leadership

The term responsibility refers to the notion of "giving an answer". It implies being accountable and justifying one's behavior (Bovens 1998; Schlenker et al. 1994), or, as Waldman and Galvin (2008, p. 328) argue, responsibility "is geared toward the specific concerns of others, an obligation to act on those standards, and to be accountable for the consequences of one's actions". Responsible leadership is an inherently normative concept where recent research has moved toward a consensus that it should be viewed through the accountability of leaders to the various stakeholders of their organizations (Doh and Quigley 2014; Pless et al. 2012; Stahl and Sully de Luque 2014).

In order to begin characterizing this accountability, scholars argue that responsible leader behavior includes both, behavior that benefits the stakeholders of a corporation and behavior that avoids harmful consequences for the stakeholders (Stahl and Sully de Luque 2014). Others base responsible leadership on the foundations of discourse ethics and deliberative democracy, theories which are concerned with the fair and equal "inclusion of the other" (Voegtlin 2011; Voegtlin et al. 2012). Finally, Pless et al. (2012) identify two dimensions that reflect a responsible leader's degree of stakeholder integration: the degree of accountability to others that leaders perceive and the breadth of stakeholders that they actually engage with; the former reflects the leader's motives, the latter the leader's behavior. For instance, leaders may engage with a broad range of stakeholders for strategic reasons while only feeling responsible for shareholders. In agreement with Pless et al., we consider the integrative responsible leader, who exhibits high degrees of both dimensions, the most suitable for addressing today's business challenges (Maak et al. 2016; Pless et al. 2012).

We build our conception of responsible leadership on this broad view of accountability to diverse stakeholder groups. However, we consider current conceptualizations

of responsible leadership still to be insufficiently specific to identify the behavioral dimensions necessary for a comprehensive operationalization of responsible leadership. Current research remains quite generic in proposing that leaders should respond to and integrate the demands of the various stakeholder groups. In accordance with Maak and Pless (2006), we think that tying responsible leadership behavior to role-related responsibilities can help in this regard. We build on stakeholder theory and their roles model (Maak and Pless 2006); however, we consider its nine roles ultimately too complex, both as a useful heuristic as well as a guide for leader behavior.

Stakeholder Theory and the Roles of Responsible Leadership

One of the most prominent classifications in stakeholder theory is that of classifying stakeholders as primary or secondary stakeholders (Clarkson 1995). Primary stakeholders are those groups “without whose continuing participation the corporation cannot survive” (Clarkson 1995, p. 106). These groups include shareholders, investors, employees, customers and other stakeholders related to the economic profitability of the organization, and there is usually a high level of interdependence between the organization and these stakeholders. Secondary stakeholders are those groups who “influence or affect, or are influenced or affected by, the corporation, but [...] are not engaged in transactions with the corporation and are not essential for its survival” (Clarkson 1995, p. 107). These include such stakeholders as NGOs, local communities and other social groups, and they usually represent broader societal concerns.

The duty to primary stakeholders requires that the leader performs her or his job well by contributing to the growth of the organization. Leadership research suggests two dimensions of leadership that fulfil this duty: structuring tasks and engaging employees (Judge et al. 2004; Stogdill 1963). We build on these two seminal dimensions to associate responsible leadership with the roles of *expert* and *facilitator*. Leaders as experts act from an efficiency orientation and display leadership aimed at fulfilling organizational performance goals. They structure tasks, define responsibilities, control work processes and plan future goals and therefore respond to the concerns of such primary stakeholders as shareholders, investors and customers. Leaders as facilitators exhibit behavior that is oriented toward motivating employees, integrating them and caring for their needs. The role of facilitator is a key aspect of responsible leadership, because employees are still the primary addressees of leadership, and not exploiting the leader–follower relationship is an essential part of being responsible (Ciulla 1998; Maak and Pless 2006). These roles reflect roles like the architect and coach in the roles model of Maak and Pless (2006) and mirror what

Patzer et al. (2018) have recently called the strategist role of responsible leadership.

In order to respond to the broader societal concerns of secondary stakeholders, a new role for leaders is required, one that has largely been neglected in leadership research. We call this the *citizen* role of responsible leadership. Leaders who act as citizens meet moral obligations to society and the environment, including future generations (Hernandez 2012; Maak and Pless 2009). They emphasize the sustainability of decisions and display citizenship behaviors that seek to create long-term value for society. Both, Maak and Pless (2006) and Patzer et al. (2018) have identified this role as pertinent to responsible leadership.

The three roles are comprehensive insofar as they not only cover the accountability toward primary and secondary stakeholders, but can be related to prevalent basic human motivations, i.e., the motivation to care for one’s task, to care for those one is entrusted with, and to care for social welfare (Alexander and Wilson 2005; Hernandez 2012; Rousseau 1990). Moreover, they offer a useful heuristic for operationalizing responsible leadership. Table 1 summarizes the three roles of responsible leadership.

Behavioral Complexity

Responsible leadership means equally considering responsibilities to diverse stakeholder groups and thus requires behavioral complexity on the part of the leader (Denison et al. 1995; Hooijberg et al. 1997). Denison et al. (1995) define behavioral complexity in leaders as “the ability to both conceive and perform multiple and contradictory roles”. Behavioral complexity surfaces in theories on paradox and ambidexterity (Rosing et al. 2011; Zhang et al. 2015). These theories argue for and show the benefit of both/and behavior over and above either/or strategies. For instance, research on ambidexterity indicates that achieving a balance between exploitation and exploration strategies is more beneficial than pursuing either the one or the other (He and Wong 2004), and ambidextrous leadership was conceptualized as switching between opening and closing leader behaviors (Rosing et al. 2011). Similarly, paradoxical leader behavior was related to “seemingly competing, yet interrelated, behaviors to meet structural and follower demands simultaneously and over time” (Zhang et al. 2015, p. 538). With regard to our focus on leader behavior targeted toward stakeholder accountability, CSR scholars argue that “firms achieve higher levels of corporate social performance through the ambidextrous ability to simultaneously pursue instrumentally and morally driven social initiatives” (Hahn et al. 2016, p. 213).

Thus, similar to ambidexterity and paradox research, the behavioral complexity of responsible leadership combines aspects of leadership that have been considered as either/or

Table 1 Responsible leadership roles

Responsible leadership role	Accountability toward stakeholders	Goal	Definition
Expert	Primary stakeholders (shareholders, investors, supervisor, customers)	Setting tasks and achieving performance goals	Describes behavior that is oriented toward the fulfillment of tasks. Leaders organize and structure work, define responsibilities, control work processes, encourage compliance with deadlines and rules, and plan future goals
Facilitator	Primary stakeholders (employees)	Motivating employees and creating a fair work environment	Describes behavior that is oriented toward the needs of employees. Leaders care for the well-being of employees and their satisfaction, mediate conflicts, and motivate them
Citizen	Secondary stakeholders (NGOs, community, state, family, etc.)	Creating (long-term) value for society	Describes behavior that is oriented toward the needs of society. Leaders consider the consequences of their behavior for society and the environment, develop a long-term and sustainable vision and emphasize the relevance of social responsibility

leader behaviors and conceptualizes them as both/and. This combination results in a novel leadership concept that has the potential to contribute to more beneficial, triple-bottom line solutions for organizations. To summarize the previous points, we understand responsible leadership as leaders' behavior oriented toward the fulfillment of organizational tasks, the needs of employees and the needs of society simultaneously and over time. Leaders assume responsibility toward primary and secondary stakeholders in their roles as expert, facilitator and citizen.

Antecedents and Outcomes of Responsible Leadership

Drawing on theories of responsibility toward stakeholders (Biddle 1986; Donaldson and Preston 1995; Tetlock 1999) and behavioral complexity (Denison et al. 1995; Zhang et al. 2015), we propose two psychological mechanisms that lead individuals to engage in responsible leadership behavior: first, individuals will act as responsible leaders when responding to the stakeholder expectations that each role meets is perceived an obligation and second, when they possess the cognitive ability to take the responsibilities associated with different roles into account simultaneously. Based on these theories, we argue that it is the leaders' ability to perceive the needs of others (based on their empathy), the compulsion to consider those needs relevant (congruence with personal values, positive affect), and the ability to cognitively process those needs simultaneously (holistic thinking) that drives perceptions of responsibility and, subsequently, the performance of the three roles of

responsible leadership. Moreover, stakeholder responsibility and complexity theories, in combination with social learning theory, suggest that responsible leadership relates positively to leader effectiveness as well as to employees' sense of responsibility for their jobs, their colleagues, and the community (reflecting the three roles of responsible leadership). Finally, various stakeholders will perceive responsible leaders as desirable and the companies these leaders work for as attractive employers (see Fig. 1).

Antecedents of Responsible Leadership

In order to develop a sensitivity to stakeholder concerns and to perceive the obligations associated with the three roles of responsible leadership, individuals need the cognitive ability to adopt the perspectives of stakeholders or to experience empathic concern for them. These two dimensions comprise the concept of empathy (Davis 1983). Perspective taking is the ability to spontaneously adopt the psychological viewpoint of others and can make leaders aware of the concerns of stakeholders (Davis 1983; Singer 2006). Perspective taking also makes individuals more conscious of what is expected from them (Bzdok et al. 2012) and should therefore increase their perception of the obligations they have to the organization, its employees, and society. Empathic concern motivates individuals to care for stakeholders' needs (Davis 1983; Singer 2006) and to assume responsibilities beyond those codified in their job contracts.

Overall, empathy has been shown to relate positively to prosocial behavior (Eisenberg 1986), and successful decision making in a social setting depends on an individual's ability to empathize with others (Frith and Singer 2008).

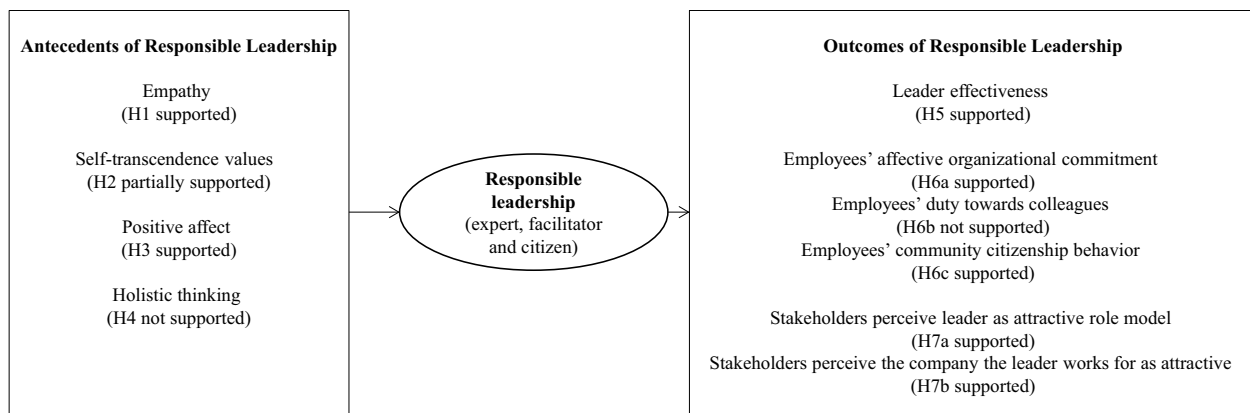


Fig. 1 Antecedents and outcomes of responsible leadership

Furthermore, scholars have argued that empathy is a basis for connectedness and should be positively related to responsible leadership (Stahl and Sully de Luque 2014). Only if leaders are able to assume the perspectives and feel the needs of others will they be able to recognize stakeholders' concerns and, in turn, behave responsibly to those stakeholders. Moreover, feeling the need to respond to the concerns of diverse stakeholder groups will cause leaders to engage in various roles. Thus, we argue:

H1 Empathy is positively related to responsible leadership.

Values explain what motivates individual behavior. They are the criteria that individuals use to select and justify actions (Schwartz 1992, p. 1). Scholars have identified two dominant value orientations that determine leaders' orientation to stakeholders: the level of self-interest versus other-regarding interest (Agle et al. 1999, p. 510). Leaders with other-regarding values have been shown to consider a wider variety of stakeholders as salient, and followers perceive such leaders as more visionary (Agle et al. 1999; Sully de Luque et al. 2008). Building on these prior findings and on value theory (Schwartz 1992; Schwartz and Bilsky 1990), we distinguish between self-regarding/self-enhancement values and other-regarding/self-transcendence values. We argue that self-enhancement values motivate leaders to focus exclusively on task-related obligations and to develop a strong sense of the role responsibilities of an expert, thereby shunning out stakeholder complexity. In contrast, self-transcendence values capture the extent to which individuals care for the well-being of others (Schwartz 1992) and thus increase leaders' perceived obligations both to their employees and to the environment, motivating leader behavior that reflects all three roles of responsible leadership.

H2 Self-transcendence values are positively related to responsible leadership.

Positive affect reflects "the extent to which a person feels enthusiastic, active, and alert. High PA [positive affect] is a state of high energy, full concentration, and pleasurable engagement" (Watson et al. 1988, p. 1063). Positive affect is conducive to good interpersonal relations and achievement (Harvey et al. 2007; Solomon et al. 1986). Prior research has shown that being in a good mood helps toward caring for others (Watson et al. 1988). High positive affect has also been related to greater social influence and success in negotiations (Chemers et al. 2000) and has been found to be associated with better relations between leaders and followers (Solomon et al. 1986). Individuals with high levels of positive affect "not only perceive their situations in an optimistic way (i.e., as amenable to improvement), but also are generally more proactive in seeking positive situations" (Harvey et al. 2007, p. 267). Therefore, we argue that positive affect is an important precondition for developing the motivation to care for and engage with different stakeholders and also to perform multiple roles. Furthermore, it can help leaders maintain good stakeholder relations, as individuals are more likely to form positive perceptions of others who have high positive affect (Harvey et al. 2007).

H3 Positive affect is positively related to responsible leadership.

Holistic thinking has been defined as considering "relationships between a focal object and the field and explaining and predicting events on the basis of such relationships" (Nisbett et al. 2001, p. 293). Holistic thinking has been shown to be relevant for dealing with complexity (Choi et al. 2007), and research has linked it with paradox leadership (Zhang et al. 2015). Individuals with the capacity to think holistically assume that everything is integrated, including contradictory demands (Zhang et al. 2015). It is this ability to see the whole picture, rather than just its parts, that may enable leaders to recognize the expectations

of the diverse stakeholder groups and to develop integrative solutions. Scholars have argued that cognitive complexity is an antecedent of integrative responsible leadership (Maak et al. 2016). Seeing valid arguments on both sides of an issue and balancing competing legitimate concerns against one another requires both considerable cognitive effort and an idea of what the whole picture might be (Green et al. 2000).

H4 Holistic thinking is positively related to responsible leadership.

Outcomes of Responsible Leadership

Leader effectiveness can be understood as producing high-quality results, accomplishing goals, and meeting performance standards (Lawrence et al. 2009). Scholars have shown that behavioral complexity is related to leader effectiveness (Denison et al. 1995; Lawrence et al. 2009). These scholars argue that a behaviorally complex leader is someone “who has the ability to perform the multiple roles and behaviors that circumscribe the requisite variety implied by an organizational or environmental context” (Lawrence et al. 2009, p. 88); in other words, he or she can respond to various demands and is flexible in adapting to new circumstances. This should also apply to the multiple roles of responsible leadership.

Complexity theory states that increasing complexity in the environment needs to be met by increasing complexity in the system if the system is to remain effective (Schneider et al. 2017). If we transfer this argument to leaders' individual behavior, it means that a business environment characterized by increasingly complex stakeholder demands requires that leaders match that increase in complexity. Performing the three roles of responsible leadership is a way of increasing behavioral complexity. Consequently, responsible leaders should be more effective in such an environment.

Leadership research further underscores the relevance of each of the three roles in effective leadership. For instance, according to path-goal theory (House 1971), clarifying the paths to desired goals and removing performance obstacles leads to effective leadership. The leader in her or his role as an expert sets tasks and defines responsibilities to provide a clear path for achieving performance goals and should thus be perceived as an effective leader. Research on leader-member exchange argues that good relations with employees contribute to leader effectiveness (Dulebohn et al. 2012). Leaders are most likely to create such positive relationships with their followers in their role as facilitators. Finally, leadership research proposes that caring for others beyond oneself can lead to positive identification with that person and to higher effort and motivation (Liden et al. 2013). The leader shows such concern for others beyond the organizational boundaries in the role of citizen.

Overall, we argue that each role contributes to leader effectiveness, but it is particularly the behavioral complexity of performing all three roles that makes responsible leaders most effective in a complex stakeholder environment.

H5 Responsible leadership is positively related to leader effectiveness.

Social learning theory (Bandura 1977) suggests that employees model the behavior of attractive role models. Responsible leaders will be perceived as desirable role models to follow because they show task proficiency while simultaneously caring for the concerns of others. Employees will respect them as individuals who combine high performance expectations with considerations for the needs of employees and society. Consequently, Doh and Quigley (2014) argue that responsible leadership resonates “psychologically at the individual level, resulting in higher levels of engagement with the organization”, and Voegtlin et al. (2012) propose that responsible leaders' role-modeling behavior and direct integration and consideration of employees positively influence the job-related attitudes and behavior of employees, such as their commitment and organizational citizenship behavior.

Specifically, we propose that responsible leadership has a positive impact on employees' organizational commitment, their duty to colleagues and their community engagement because employees will try to imitate responsible leaders' behavior as experts, facilitators and citizens. That is, leaders in their role as experts emphasize that it is important to contribute to the organization's success, and by trying to imitate the leader, employees show higher levels of organizational commitment (Allen and Meyer 1990). More specifically, we argue that affective commitment to the organization (Allen and Meyer 1990) is triggered by responsible leaders because they convey a sense of purpose and direction in employees that is linked to organizational success. Furthermore, responsible leaders who show care and concern for their followers also affect the sense of duty those employees perceive for their co-workers (Hannah et al. 2014). Finally, responsible leaders who display citizenship behaviors such as emphasizing the relevance of long-term thinking and giving back to society stimulate employees' community citizenship behavior (Liden et al. 2008).

H6a Responsible leadership is positively related to employees' affective organizational commitment.

H6b Responsible leadership is positively related to employees' duty to colleagues.

H6c Responsible leadership is positively related to employees' community citizenship behavior.

Responsible leaders will not only be perceived as positive role models by employees but also by other stakeholders. Drawing again on social learning theory (Bandura 1977) and complexity theory, we argue that also external stakeholders perceive leaders who are able to cater to a variety of interests as attractive and would prefer to work in companies with such leaders. Moreover, we propose that the process of considering the concerns and opinions of stakeholders is already sufficient to elicit positive evaluations from those stakeholders. Empirical research shows that deliberation, that is, considering and engaging with relevant stakeholder groups, leads to higher satisfaction and greater acceptance of decisions (Carpini et al. 2004), and research on integrative responsible leadership suggests that weighing and balancing stakeholder concerns fosters stakeholder trust and desirable outcomes for all affected (Doh and Quigley 2014; Voegtlin et al. 2012). This is important to investigate, because external stakeholders are often only able to base their evaluations on their participation in a decision-making process and not on recurring patterns of a leader's behavior.

Therefore, we compare the decision making underlying our three-roles model of responsible leadership to leadership performing only the roles of expert and facilitator and to leadership performing only the role of an expert. These less complex conceptions of responsible leadership are also prevalent in the literature and could be described as "internal ethics management", neglecting the broader stakeholder focus (Frisch and Huppenbauer 2014), and instrumental, shareholder-oriented leadership (Friedman 1970; Waldman and Siegel 2008), respectively. We argue that stakeholders, whether or not their interests are congruent with those of the leader, value the more complex three-roles model of responsible leadership over the other leadership approaches, because it shows that leaders in general are more considerate of others and do not only favor "in-groups".

H7a Stakeholders perceive responsible leaders who show concern for their organization, potential employees, and the community (acting as experts, facilitators, and citizens) as more attractive leaders than leaders who only show concern for their organization and potential employees (acting as experts and facilitators), or leaders who only show concern for their organization (acting as experts).

H7b Stakeholders perceive companies with leaders who show concern for their organization, potential employees, and the community (acting as experts, facilitators, and citizens) as more attractive employers than companies whose leaders only show concern for their organization and potential employees (acting as experts and facilitators) or whose leaders only show concern for their organization (acting only as experts).

Method

We tested our three-roles model of responsible leadership in three studies. Study 1 investigated the antecedents and outcomes displayed in Fig. 1, testing all the hypotheses except for H3 and H7 with a multi-source sample of leader–follower dyads. Study 2 tested the relation between personality characteristics and responsible leadership. The aim was to replicate and expand the findings of Study 1 by testing hypotheses one to four, whereby independent and dependent variables were measured at different time points. In addition to Study 1, Study 2 investigated the influence of participants' positive affect on responsible leadership (H3) and controlled for individuals' basic personality characteristics using the HEXACO personality inventory (Lee and Ashton 2015). Finally, Study 3, using an experimental design, compared our conception of responsible leadership to less complex forms of responsible leadership with regard to the attractiveness of the leader and the attractiveness of the company that the leader works for (H7a, b). The choice of samples we use for the three studies is based on our theoretical conceptualization of responsible leadership as leaders' accountability to primary and secondary stakeholders. Study 1 focuses on employees as core primary stakeholders. In order to increase the confidence in our findings, we added study 2 based on a sample of university students who assume leadership roles to confirm the relations between personality characteristics and responsible leadership. Study 3 focuses on external, secondary stakeholders to evaluate responsible leadership.

Measuring Responsible Leadership

Because measuring responsible leadership requires each of the three roles and their balance to be measured, a simple mean of the scores of all three roles did not seem feasible (Hooijberg et al. 1997). We thereby follow research on leader behavioral complexity and draw on the measure of Bobko and Schwartz (1984) that has been used in research analyzing behavioral complexity (Kaiser et al. 2007), including leadership complexity (Hooijberg et al. 1997) to calculate the overall score of responsible leadership. This method "was developed as a way to construct a single continuous variable to represent the integrative balance of conceptually opposing constructs" (Kaiser et al. 2007, p. 47). Kaiser et al. (2007) compare various measures of behavioral complexity and conclude that the formula is one of the best measures to assess behavioral complexity. We use the extended formula proposed by Hooijberg et al. (1997):

Responsible leadership score

$$= \sum_{(1-z)} [(k-1) - (|X-Y|) * [(X+Y)/2]]$$

K represents the higher end of a rating scale (e.g., the value of 5 of a five-point Likert scale ranging from one to five), X and Y stand for seemingly bipolar yet theoretically

related concepts, in this case our leadership roles, and Z represents the number of pairs of bipolar concepts (Hooijberg et al. 1997, p. 391). We have three pairs of bipolar concepts: expert-facilitator, expert-citizen and facilitator-citizen. Applied to our setting, the first factor of the equation measures the balance between two roles. The second factor is the mean score of the two dimensions and accounts for the overall extent or strength of leadership behavior alongside the two dimensions, guaranteeing that more weight is given to leaders with a high score on both scales (Bobko and Schwartz 1984). The formula to calculate responsible leadership is used in studies 1 and 2. In study 3, we manipulate responsible leadership scenarios. The three roles of responsible leadership were operationalized differently in the three studies, because the studies rely on different study designs (questionnaire-based in study 1, verbatim recording in study 2 and scenario-based manipulation in study 3). The advantage of using different operationalizations to assess a specific construct is that it allows for triangulation and, ultimately, provides a stronger test of theory (Turner et al. 2017).

Study 1

Sample and Procedure

We collected data from Swiss executives and their subordinates. The data collection was supported by the Schweizer Kader Organisation (Swiss Executive Organization) and two EMBA programs of Swiss universities of applied sciences. The aim was to have a broad coverage of Swiss executives at different hierarchical levels and from multiple industries, both to increase confidence in the generalizability of the research results and to highlight the relevance of responsible leadership to diverse settings. Each of the organizations supporting the data collection received an invitation email introducing the study. In the email, executives were asked to complete a survey about their personal attitudes and to forward a link to a second survey to employees who report directly to them. These employees were asked to assess their supervisors' leadership behavior and their own job and community engagement. To incentivize participation, executives were promised feedback on their personality profile and leadership style.

We received slightly more executive responses than responses from employees (Supervisor $n = 137$ and subordinates $n = 120$), because some executives were merely interested in receiving feedback on their personality profile and did not invite their employees to participate in the second survey. After deleting cases with incomplete data, the final sample consisted of 190 individuals and 95 employee-supervisor dyads. In some cases, one leader was rated by several followers.

Individuals in the executive sample were predominantly male (68%), 49% were between 45 and 54 years old, 49% had a university degree, and 36% occupied top management positions, while 41% worked in middle management. The comparison of the distribution of leaders in our executive sample to the overall distribution of Swiss executives using statistics provided by the Swiss Federal Statistical Office (2016) revealed no major biases (e.g., 34% of Swiss executives occupy top management positions, compared to 36% in our sample; 62% of top management are male, compared to 68% in our sample). The employee sample consisted of 65% male participants, of whom 43% were between 25 and 34 years old, 44% had a university degree, 59% had no direct reports, and 56% had worked between one and five years together with their current supervisor. The executives and their employees were predominantly employed in small and medium sized enterprises (SMEs; 62%).

Measures

If not stated otherwise, all items were measured on a five-point Likert scale, and questionnaire items were translated from English into German following the standard translation and back-translation procedure (Brislin 1986).

Responsible Leadership

Following our theoretical argumentation, we draw on the "initiating structure" and "consideration" dimensions of the leader behavior description questionnaire (LBDQ XII; Stogdill 1963) to examine the roles of expert and facilitator.¹ Initiating structure is defined as the degree to which a leader organizes work and is oriented toward goal attainment. Consideration reflects the degree to which a leader shows respect for followers, is concerned about their welfare and supports

¹ Scholars have argued that responsible leadership overlaps to a certain extent with other leadership conceptualizations (see e.g., Miska and Mendenhall 2018; Voegtlin 2011). Especially the responsibility of leaders associated with their task- and employee-related obligations are reflected in the behavioral dispositions of previous leadership operationalizations. We draw on one of the most influential conceptualizations in this regard. The LBDQ dimensions reflect our theoretical roles of expert and facilitator. What is different in our model is the combination, and, more importantly, the balanced display of the two roles. Moreover, as we will lay out in the following, the additional citizen dimension has not been prominently placed in leadership measures, i.e., as being equally relevant as the focus on work goals and employee consideration. Miska and Mendenhall (2018) observe in this regard that "the consideration of stakeholders both within and outside organizations makes [responsible leadership...] distinct from other approaches which frequently tend to focus on followers residing solely inside the organization". This quote highlights that responsible leadership is more encompassing by giving equal weight to external, or secondary, stakeholders. This external focus is related to the idea of stewardship.

them (Judge et al. 2004; Stogdill 1963). These two dimensions reflect what we defined as expert and facilitator. A sample item of the 10-item scale of the “initiating structure” dimension of the LBDQ reads: “My supervisor maintains definite standards of performance” ($\alpha=0.89$). A sample item of the 10-item scale of the “consideration” dimension of the LBDQ reads: “My supervisor looks out for the personal welfare of group members” ($\alpha=0.87$).

To assess the role of the leader as a citizen, we use the stewardship dimensions of two servant leadership scales (Barbuto and Wheeler 2006; van Dierendonck and Nuijten 2011). Both define the stewardship role in similar ways: Van Dierendonck and Nuijten (2011) argue that stewardship is closely related to social responsibility and comprises a sense of obligation to a common good; Barbuto and Wheeler (2006) operationalize stewardship as the extent to which leaders prepare an organization to make a positive contribution to society. The justification for combining the scales is that the stewardship dimensions of both measures closely resemble what we define as citizen behavior in our responsible leadership framework: the care for external stakeholders, the focus on social responsibility and overall social welfare. Furthermore, we combined the two scales to provide a more equal distribution of the number of items for each role of responsible leadership (adding up to eight items as compared to the 10 items for each of the other two roles). A sample item of the five-item scale from Barbuto and Wheeler (2006) reads: “My supervisor sees the organization for its potential to contribute to society”. A sample item of the three-item scale from van Dierendonck and Nuijten (2011) reads: “My supervisor emphasizes the importance of focusing on the good of the whole”. Because we combined the two scales to form a new measure, we conducted an exploratory factor analysis (EFA) for the citizenship scale. The items were administered to a sample of 42 students of a public university in Switzerland who had part-time jobs and who were asked to rate their current or former supervisors. The EFA used principle axis factoring and direct oblimin rotation, and its results indicated a good factor structure for the new measure. The eigenvalue of the first factor was 4.26, explaining 53% of the variance. All item loadings on the first factor were above .50 and the items showed high reliability ($\alpha=0.89$). We calculated the overall score for responsible leadership using the formula presented above.

Empathy

To measure empathy, we used a validated German translation (Paulus 2009) of the eight-item instrument for measuring perspective taking and empathic concern included in the Interpersonal Reactivity Index (Davis 1983). A sample item reads: “I often have tender, concerned feelings for people less fortunate than me” ($\alpha=0.80$).

Value Orientation

We used Schwartz’s (1992) 18 items of the self-transcendence scale, comprising the values benevolence and universalism. Participants were asked to rate their values based on how important these are as guiding principles in their lives. Sample items of benevolence and universalism read: “Helpful (working for the welfare of others)” and “Protecting the environment (preserving nature)” ($\alpha=0.82$). We followed Schwartz’s (1992) suggestion and used a response format that ranged from one to five with an additional response option of -1 (*opposed to my values*).

Holistic Thinking

We used the 12 items of the two dimensions of “attitude toward contradictions” and “locus of attention” of the holistic thinking scale (Choi et al. 2007). Sample items read: “It is more desirable to take the middle ground than go to extremes” and “It is more important to pay attention to the whole than its parts”. The items showed relatively low internal consistency ($\alpha=0.66$). We decided to calculate the results with this scale; however, we acknowledge these limitations in the results section.

Leader Effectiveness

Leader effectiveness was measured with the four-item scale developed by Denison et al. (1995) in the version adapted by Lawrence et al. (2009). Subordinates were, for example, asked to compare their leader to others on the same hierarchical level with regard to the “meeting of performance standards (above most standards/below most standards)” and the “overall effectiveness as a leader (ineffective leader/effective leader)” ($\alpha=0.86$).

Affective Organizational Commitment

We measured affective organizational commitment with the eight-item scale from Allen and Meyer (1990). A sample item reads: “I really feel as if this organization’s problems are my own” ($\alpha=0.82$).

Duty Colleagues

Duty to colleagues was measured with the four items developed by Hannah et al. (2014). A sample item reads: “My actions demonstrate that I put the interests of my team ahead of my personal interests” ($\alpha=0.64$). These items also showed relatively low internal consistency. One reason might be that some items asked for sacrifices from the respondent (as in the exemplary item reported here), while others did not. Similar to holistic thinking, we decided to

calculate the results with this scale; however, we acknowledge these limitations in the results section.

Community Citizenship Behavior

We measured subordinates' community citizenship behavior with the seven-item scale from Liden et al. (2008). A sample item reads: "I am involved in community service and volunteer activities outside of work" ($\alpha = 0.76$).

Control Variables

We controlled for age and gender of leaders and employees, the years employees had worked together with their supervisors and the size of the organization.

Results

Table 2 presents the means, standard deviations and intercorrelations.

Because we had observations of leaders nested in different organizations, we performed a Hausman test for all our regression models to see whether we should use a fixed-effects model to obtain consistent estimators (Antonakis et al. 2010). The results are for Model 1 (responsible leadership): $\chi^2(3) = 4.20, p = 0.240$, Model 2 (effectiveness): $\chi^2(4) = 13.66, p < 0.01$, Model 3 (organizational commitment): $\chi^2(4) = 2.87, p = 0.579$, Model 4 (duty colleague): $\chi^2(4) = 1.66, p = 0.798$, Model 5 (community citizenship behavior): $\chi^2(4) = 13.04, p < 0.05$. We thus included fixed-effects dummies for the leaders for Models 2 and 5.

We also performed a Breusch–Pagan test to test for heteroscedasticity, which is especially relevant in cases involving nested data (Antonakis et al. 2010). The results show that heteroskedasticity presented no problem in our case (Model 1: $\chi^2(9) = 7.23, p = 0.613$; Model 2: $\chi^2(10) = 9.61, p = 0.476$; Model 3: $\chi^2(10) = 16.56, p = 0.085$; Model 4: $\chi^2(10) = 9.19, p = 0.514$; Model 5: $\chi^2(10) = 5.28, p = 0.872$).

Table 3 presents the results of testing the hypotheses. H1 is supported by a positive relation between leaders' empathy and responsible leadership ($\beta = 0.50, p < 0.01$). Leaders' self-transcendence values were not positively related to responsible leadership ($\beta = -0.31, ns$). However, when testing for the separate value dimensions, benevolence and universalism, we found a positive relation between universalism and responsible leadership ($\beta = 0.44, p = 0.063; R^2 = 0.19, p < 0.05$). The result indicates that embracing universal values of caring for sustainability and the well-being of people and the planet might influence the performance of responsible leadership. We did not find support for H4, i.e., leaders' holistic thinking was not significantly related to responsible leadership ($\beta = 0.11, ns$). Because of the low reliability of

the measure of holistic thinking, this result should be treated with caution.

With regard to the outcomes of responsible leadership, the results showed a strong positive relation between responsible leadership and leader effectiveness ($\beta = 0.52, p < 0.001$), supporting H5. We also found a positive significant relation between responsible leadership and employees' affective organizational commitment ($\beta = 0.32, p < 0.01$), supporting H6a. However, we did not find a positive relation between responsible leadership and employees' duty to colleagues (H6b, $\beta = 0.01, ns$). Again, this might be due to the low internal consistency of our measure of duty to colleagues. We would encourage future research to test for this relation again. The relation between responsible leadership and employees' community citizenship behavior was marginally significant ($\beta = 0.31, p < 0.1$), lending support to H6c. Moreover, when testing only for those items that the leader can directly influence (e.g., "I take into consideration the effects of decisions I make in my job on the overall community") and removing three items that relate to actual community work outside the organization (e.g., "I am involved in community service and volunteer activities outside of work"), the relation becomes significant on the .01 level ($\beta = 0.44, p < 0.01; R^2 = 0.44$).

Robustness Tests

Because some leaders had multiple employee ratings, we computed the interrater agreement indices r_{wg} (James et al. 1984) and intraclass coefficients (ICC(1) and ICC(2) (Bliese 2000) for the responsible leadership measure (Expert: $r_{wg} = 0.81; ICC(1) = 0.42; ICC(2) = 0.77$; Facilitator: $r_{wg} = 0.90; ICC(1) = 0.53; ICC(2) = 0.83$; Citizen: $r_{wg} = 0.78; ICC(1) = 0.24; ICC(2) = 0.58$).

Moreover, we tested for the effects of the individual roles on the outcomes. It showed that the facilitator seems most decisive for organizational commitment ($\beta = 0.27, p < 0.05$) and the citizen for employees' community citizenship behavior ($\beta = 0.30, p < 0.05$). All three roles were positively related to leader effectiveness ($p < 0.001$ for all three roles). These results lend support to the ideas that first, all three roles are important elements in effective leadership and second, that it is only the balance of the three roles that enables leaders to fully respond to primary and secondary stakeholder demands, or the demands of the organization and society, respectively.

As a final robustness test, we applied an instrumental variable approach with a two-stage least square (2SLS) estimation procedure to account for a potential endogeneity bias (Antonakis et al. 2010). We tested the relation between leader behavior and follower outcomes, as those relied on single-source data. Following the suggestions of Antonakis et al. (2010), we draw on stable individual differences. The

Table 2 Descriptive statistics and correlations study 1

Study variables	Mean	SD	1	2	3	4	5	6	7	8	9	10	11	12	13
1. Age supervisor	3.62	0.80													
2. Gender supervisor	1.73	0.45	0.10												
3. Age employee	2.91	1.05	0.31**	0.11											
4. Gender employee	1.65	0.48	0.27*	0.52***	-0.02										
5. Work tenure with supervisor	2.30	1.07	0.40**	0.09	0.30**	0.05									
6. Size organization	1.88	0.91	-0.03	0.02	-0.17	0.10	-0.09								
7. Empathy supervisor	3.55	0.51	0.08	-0.16	-0.02	-0.32**	0.03	-0.15							
8. Holistic thinking supervisor	3.62	0.44	-0.26**	-0.04	0.13	-0.31**	0.05	-0.14	0.48***						
9. Self-transcendence values supervisor	3.85	0.63	0.10	-0.20*	-0.14	-0.29**	0.11	0.07	0.32***	0.12					
10. Responsible leadership	37.30	7.68	0.36**	0.01	0.09	0.17	0.17	0.01	0.36**	0.17	0.14				
11. Leader effectiveness	3.97	0.69	0.21	-0.10	-0.01	0.08	0.18	0.21	0.01	-0.17	-0.02	0.61***			
12. Organizational commitment employee	3.42	0.76	0.42***	-0.02	0.12	0.17	0.27*	-0.15	0.07	-0.24*	-0.00	0.37**	0.42***		
13. Employee duty toward colleagues	4.18	0.49	0.18	-0.19	0.14	0.13	-0.02	-0.12	0.15	0.02	0.01	0.12	0.26*	0.29**	
14. Employee community citizenship behavior	2.68	0.70	-0.04	-0.01	0.08	0.08	-0.04	-0.02	0.06	-0.02	0.09	0.14	-0.08	-0.07	0.02

For gender, 1 = female, 2 = male. For age, 1 = less than 24 years, 2 = 25-34 years, 3 = 35-44 years, 4 = 45-54 years, 5 = 55+ years. For work tenure with supervisor, 1 = less than 1 year, 2 = less than 5 years, 3 = 6-10 years, 4 = 11-15 years, 5 = 16-20 years, 6 = 21-25 years, 7 = 26+ years. For size organization, 1 = less than 50 employees, 2 = 50-250 employees, 3 = more than 250 employees

N=95

* $p < 0.05$

** $p < 0.01$

*** $p < 0.001$

Table 3 Regression results study 1

Variables	Model 1 responsible leadership	Model 2 leader effec- tiveness	Model 3 employee organizational commit- ment	Model 4 employee duty toward col- leagues	Model 5 employee community citizenship behavior
Age supervisor	0.21	0.60*	0.20	0.12	0.13
Gender supervisor	0.08	-0.09	0.08	-0.12	-0.69**
Age employee	0.05	0.13	0.01	0.15	0.03
Gender employee	0.11	-0.13	-0.09	0.10	0.03
Work tenure with supervisor	0.11	-0.04	0.16	-0.01	0.10
Size organization	0.21	0.26	-0.27*	-0.10	-0.14
Empathy supervisor	0.50**	0.00	0.04	0.23	-0.29
Holistic thinking supervisor	0.05	-0.22+	-0.38**	-0.09	0.30
Self-transcendence values supervi- sor	-0.20	-0.81**	0.02	-0.08	-0.02
Responsible leadership		0.52***	0.32**	0.01	0.31+
Fixed effects controls		Included			Included
R ²	0.30**	0.63***	0.39***	0.11	0.39+

The table reports standardized beta coefficients

+ $p < 0.1$

* $p < 0.05$

** $p < 0.01$

*** $p < 0.001$

authors specifically mention hormones, like testosterone, as valid instruments. We heeded their advice and used the ratio of second-finger-length to fourth-finger-length (2D:4D) as a marker of prenatal testosterone levels in humans as an instrument. The 2D:4D ratio has been proven to be a stable and valid predictor of testosterone in both clinical (e.g., Rahman et al. 2011) and non-clinical contexts (e.g., Coates et al. 2009), with smaller values indicating higher prenatal testosterone levels. The theoretical reasoning behind the instrument is that prenatal testosterone is genetically determined and is thus an exogenous source of variance. Testosterone has been shown to influence leader behavior (Bendahan et al. 2015) and was related to self-regarding, aggressive behavior and the pursuit of power (Schultheiss et al. 2004), factors that should also relate to the leaders' display of responsible leadership.

To measure the 2D:4D ratio, we followed the procedure used by Coates et al. (2009) and asked the supervisors who participated in our study to send us a scan of their right hand. We adjusted the scans to a coherent scaling and measured digit length from the metacarpophalangeal crease to the fingertip (see Coates et al. 2009). We obtained data for 43 leader-follower dyads. The mean of our instrumental variable was 0.95 ($sd = 0.02$). In the first step, the regression showed significant results ($\beta = -0.44$, $p = 0.007$) when regressing responsible leadership on our instrumental variable testosterone. In the second step, the predicted values (by the instrumental variable) from the first regression model were used to replace the responsible leadership measure

in the 2SLS regression. The results of this model showed a significant main effect for leader effectiveness ($\beta = 0.61$, $p < 0.001$), employee organizational commitment ($\beta = -0.37$, $p = 0.001$) and employee community engagement (the abbreviated version) ($\beta = 0.26$, $p = 0.02$), lending confidence to our findings.

Study 2

Sample and Procedure

We collected data from 97 students of a public university in Switzerland. The participants were incentivized by a lottery in which they could win an iPad mini or Amazon vouchers, and psychology students received "experimental hours". The independent variables were measured at time 1 through an online survey that had to be completed at least one day before the laboratory study, and the dependent variable was measured when participants came to the laboratory at time 2. To measure responsible leadership, participants were asked to assume the role of a CEO and were confronted with a business scenario that allowed responsible leadership to be demonstrated. They had to "think out loud" about possible solutions to the scenario. Participants were predominantly male (66%) with a mean age of 23 ($sd = 4.10$), and 79% had worked during the last year.

Responsible Leadership Decision Making Exercise

Subjects were instructed that they were to analyze and solve a business challenge while continuously thinking aloud. The think-aloud method, also called verbal protocol analysis, is a method that can be used to assess individuals' cognitive processes while they respond to demanding problems (Ericsson 2003; Ericsson and Simon 1993; Laureiro-Martínez and Brusoni 2016). The method has been applied to study cognitive phenomena both generally and in management (Isenberg 1986; Laureiro-Martínez and Brusoni 2016). It aims to reveal the mental processes that take place when an individual performs a problem-solving task (Ericsson 2003).

The problem presented for the think-aloud protocol was inspired by the current complexity of responsible leadership decisions in business firms (Maak et al. 2016). We designed and pilot-tested several business cases before arriving at the structure and wording of the problem we used in this study. The final version of the problem was further pilot tested with four participants not included in the study. The problem requires participants to assume the role of a CEO who has to decide if he or she wants to introduce a new technology that would increase firm performance but is at the same time more damaging to the environment. The new technology would also require fewer staff. Participants were asked to consider the consequences for the various stakeholders of the corporation while thinking out loud about how they would decide.

Participants were given verbal instructions and completed a trial exercise in which they were presented with a task that made them familiar with the method. After that, the study problem was presented. Participants were told to read the scenario text out loud and to continue voicing their thoughts immediately after they had finished reading. In order to minimize social desirability, we created an atmosphere where participants felt comfortable, where they were under no time pressure to respond, and where they were told not to interact with the researcher, an aspect of the task that they had practiced. Furthermore, participants were given the case only after the trial exercise and told to start reading it out immediately and to continue voicing their thoughts directly after they finished reading. This procedure ensures that they have no time to find socially desirable answers. Moreover, the need to voice their thoughts immediately after reading the case helps to ensure that their actual decision making is verbalized and avoids retrospective and introspective biases (Ericsson 2003; Laureiro-Martínez and Brusoni 2016). The average response time was 131 s (SD 55.5). Participants were tape-recorded during the exercise.

Measures

If not stated otherwise, all items were measured on a five-point Likert scale.

Responsible Leadership

Participants' responses to the think-aloud exercise were coded. Participants were assessed on a five-point Likert scale on the extent to which they considered the consequences for the firm (expert role), their employees (facilitator role) and society and the environment (citizen role). The overall score was calculated using the formula presented above. Two principal investigators and two naïve coders, who were not aware of the study's purpose, coded the responses to the scenarios for the three roles of responsible leadership. Interrater agreement among all four coders was high ($ICC(2)=0.78$ (single), 0.94 (average), $p < 0.001$).

Empathy

The same measure of empathy that was used in Study 1 was also used in Study 2 ($\alpha=0.74$).

Holistic Thinking

We used the same scale as in Study 1, except that we used all four dimensions of the holistic thinking scale (Choi et al. 2007), including "causality" and "perception of change" ($\alpha=0.74$).

Positive Affect

We used the German translation (Krohne et al. 1996) of the Positive and Negative Affect Schedule (PANAS) to measure positive affect (Watson et al. 1988). The scale contains a number of words that describe different feelings and emotions associated with positive and negative affectivity. Participants were asked if they generally feel this way. Examples include "interested", "alert", "excited" or "inspired" ($\alpha=0.85$).

Control Variables

We controlled for the age and gender of participants, the HEXACO personality trait inventory (including honesty-humility, extraversion, agreeableness, conscientiousness, openness to experience; Lee and Ashton 2015), study subject and the time that participants talked during the think-aloud exercise. We did not include the dimension of emotionality from the HEXACO measure because of its high multicollinearity with empathy. Both concepts are very closely related and redundant in the current study.

Table 4 Descriptive statistics and correlations Study 2

Study variables	Mean	SD	1	2	3	4	5	6	7	8
1. Gender	1.66	0.48								
2. Age	23.19	4.10	0.06							
3. Speaking time (in seconds)	131.22	55.49	-0.15	0.00						
4. Study subject	2.09	0.69	0.16	0.01	0.12					
5. HEXACO Personality (without emotionality)	3.52	0.28	0.00	0.09	0.11	0.18				
6. Empathy	3.81	0.52	-0.20	0.01	0.18	-0.07	0.36***			
7. Holistic thinking	3.66	0.37	-0.11	-0.03	0.00	-0.04	0.05	0.36***		
8. Positive affect	3.61	0.58	0.07	-0.11	0.12	-0.08	0.40***	0.13	0.01	
9. Responsible leadership	21.85	7.43	-0.13	-0.10	0.49***	-0.05	0.08	0.34**	0.10	0.24*

For gender, 1 = female, 2 = male. For study subject, 1 = business administration and economics, 2 = psychology, 3 = other. Age in years. $N = 97$

* $p < 0.05$

** $p < 0.01$

*** $p < 0.001$

Results

Table 4 reports the means, standard deviations and inter-correlations, and Table 5 presents the results of testing the hypotheses.

We found additional support for H1, i.e., a positive relation between participants' empathy and their responsible leadership decision making ($\beta = 0.28$, $p < 0.01$). We also found a positive, albeit only slightly significant, relation between positive affect and responsible leadership decision making ($\beta = 0.19$, $p < 0.1$), lending support to H3. Again, there was no support for any positive influence of holistic thinking ($\beta = -0.00$, ns) and thus none for H4. We reflect on the potential implications of these findings in more detail in our discussion section.

Study 3

Sample and Procedure

Study 3 used a sample of participants from the working population in Germany that were recruited via ResearchNow, a provider of research participants similar to Mechanical Turk. We received 495 responses from 793 invited participants (response rate 62%). The participants were 55.2% female, with 22.8% between 35 and 44 years old, 35.2% having worked less than 5 years for their current company. The majority were employees with no direct reports (54.9%) and were employed by small and medium-sized companies (55.1%).

We used an experimental design where participants were randomly assigned to one of six different leadership scenarios. We manipulated the description of the leader's decision

making and the interests of stakeholders. Each participant was confronted with one of three leadership scenarios (leadership decision making resembles responsible leadership, internally focused leadership, or instrumental leadership) and had to assume the view of one of two stakeholder groups (participants assume the role of job seekers or owners of allotment gardens), resulting in a 3×2 between-subjects factorial design. The distribution of participants over the different conditions was even. The participants were asked to complete a post hoc survey to assess the dependent variables. The scenarios were pretested by 16 students from a Swiss university and 17 PhD students and faculty members from our department.

Table 5 Regression results study 2

Variables	Model 1 responsible leadership
Age	-0.07
Gender	-0.01
Speaking time (in seconds)	0.44***
Study subject	-0.04
HEXACO personality (without emotionality)	-0.13
Empathy	0.28**
Holistic thinking	-0.00
Positive affect	0.19+
R^2	0.35***

The table reports standardized beta coefficients

+ $p < 0.1$

* $p < 0.05$

** $p < 0.01$

*** $p < 0.001$

Measures

If not stated otherwise, all items were measured on a five-point Likert scale.

Responsible Leadership

In the responsible leadership (RL) scenario, the leader was described as someone who weighs and balances different opinions and tries to create a consensus among the various stakeholder groups. The scenario depicted the engagement of the leader with potential employees (job seekers), the community (owners of allotment gardens), and the interests of the company, resembling our three roles of expert, facilitator and citizen. The internally focused leader (IFL) was described as someone who is concerned about the company, tries to create employment, and is fair and ethical in the treatment of employees. This leader focuses on primary stakeholder groups and resembles the leader as expert and facilitator. Finally, the instrumental leader (IL) was described as one who cares for the success of the company, tries to increase profits, and decides what is best for the company. This leadership style represents the expert role.

Stakeholder Groups

Participants assumed the point of view of either job seekers or owners of allotment gardens. While job seekers' interests were aligned with the interest of the leader, the owners of allotment gardens had opposing interests to those of the leader.

Attractiveness of the Leader

The attractiveness of the leader displayed in the scenario was measured with three items ("How far would you consider [name of the leader in the scenario] a role model?"; "How far could you learn something from him?"; "How far would you like to have him as your boss?"; $\alpha = 0.92$).

Attractiveness of the Company

The attractiveness of the company was measured with two items ("Would you like to work for the company?" and "Would you recommend the company as an employer?"; $\alpha = 0.96$).

Results

To check that the manipulation had worked, we asked participants to rate the leadership style of the scenarios with which they had been confronted. We used existing scales of leadership. The manipulation of RL was assessed with

the short responsible leadership scale as stakeholder integration (Voegtlin 2011; $\alpha = 0.96$). The manipulation of IFL was assessed with the scale of ethical leadership (Brown et al. 2005; $\alpha = 0.94$), because ethical leadership has a strong focus on company internal ethics management, but does not consider other stakeholders. We developed items for a measure of IL (sample item: "decides what is best for the firm"; $\alpha = 0.81$). The manipulation test showed significant differences between RL, IFL, and IL (RL scenarios: $F(5, 489) = 102.56, p < 0.001$; IFL scenarios: $F(5, 489) = 107.59, p < 0.001$; IL scenarios: $F(5, 489) = 8.71, p < 0.001$). Finally, significant differences emerged between job seekers ($M = 3.58$) and owners of allotment gardens ($M = 2.28$), with $t(487) = -10.939, p < 0.001$, when asking participants whether their interests were similar to those of the leader (which was the case for job seekers, but not for the owners of allotment gardens). Randomization control showed no significant differences in the demographics of participants across the different groups.

After the manipulation check, we calculated the results of the study by comparing means between the scenarios. The results show that responsible leaders were perceived as more attractive role models than internally focused and instrumental leaders ($M_{RL} = 4.00, M_{IFL} = 3.23, M_{IL} = 1.95, p < 0.001$). Participants were also significantly more inclined to work for a company with a responsible leader than for a company with an internally focused or a purely instrumental leader ($M_{RL} = 3.91, M_{IFL} = 3.37, M_{IL} = 2.11, p < 0.001$).

Discussion of the Study Results

Across the three studies, we find support for most of our hypotheses (see Fig. 1). With regard to the antecedents, the results of Study 1 indicate that responsible leadership behavior is facilitated by leaders' empathy. While we hypothesized a positive relation between two self-transcendence values, benevolence and universal value orientation, and responsible leadership, the results only supported a positive influence of leaders' universal value orientation on responsible leadership. In Study 2, we replicated the findings of Study 1 regarding the positive significant relation between empathy and responsible leadership. Study 2 also indicated that positive affect is positively related to the display of responsible leadership. These results hold when controlling for basic personality traits such as honesty-humility, extraversion, agreeableness, conscientiousness and openness to experience.

In neither study did we find support for the relation between holistic thinking and responsible leadership. There might be two reasons for this. First, the measure of holistic thinking we used is based on a comparison between holistic thinking in East Asian cultures and

analytic thinking in Western cultures (Choi et al. 2007). Such holistic thinking might still be quite unfamiliar to the Western executives and employees in our samples, and consequently, might not be as relevant for those leaders to be able to display behavioral complexity. Rather, behavioral complexity in a Western context might be triggered by the more unidimensional thinking of perceived obligations toward multiple stakeholder groups (e.g., sparked by empathic reactions or personal values, as our results suggest). Similarly, stakeholders might base their evaluations of behavioral complexity more strongly on the perceived individualized consideration that they observe the leader to display toward themselves and other stakeholder groups, rather than the search for interdependent solutions that take into account a bigger picture and might thereby be farther removed from the actual concerns of each stakeholder. Second, the concept of holistic thinking puts an emphasis on simultaneity. Behavioral complexity also has a temporal dimension. Another explanation for the non-significant findings might therefore be that leaders do not necessarily have to display the three roles literally at the same time, but can give equal importance to all three roles over time and still be perceived as behaviorally complex responsible leaders. For this, holistic thinking is not necessarily a prerequisite. We would encourage future research to test the relation between holistic thinking and responsible leadership with different measures of holistic thinking and in different cultural contexts.

With regard to the outcomes, the results of Study 1 demonstrate that responsible leadership is positively related to leader effectiveness and to employees' engagement with the organization (employees' organizational commitment) and society (employees' community citizenship behavior). Responsible leadership was not significantly related to employees' duty to colleagues. This might be due to the low reliability score of the measure of duty orientation and should be tested again in future studies. Finally, the results of Study 3 show that responsible leadership as we conceptualize it has a positive influence on stakeholder perceptions. Stakeholders perceive such responsible leaders as more attractive leaders than internally focused leaders and instrumental leaders. Stakeholders would also prefer to work for a company with a responsible leader as a CEO than for a company with an internally focused or an instrumental leader as CEO. This holds both for stakeholders who might be more favorable to the leader because they share common interests and for stakeholders who hold opposing interests. The study shows that engaging with the various stakeholders who together require a leader to be an expert, a facilitator, and a citizen at the same time is rewarded by more favorable stakeholder evaluations of the leader than merely being a good expert and/or facilitator.

General Discussion

The article contributes to responsible leadership research (Doh and Quigley 2014; Miska and Mendenhall 2018; Pless et al. 2012; Stahl and Sully de Luque 2014; Voegtlin et al. 2012; Waldman and Siegel 2008) in several ways. First, it advances the theoretical understanding of responsible leadership by developing a model of leadership that connects elements of behavioral complexity with responsibility. It is the first study to provide a concept of responsible leadership that identifies concrete behavioral practices related to leaders' task, relational, and citizenship obligations and shows how these practices can be enacted together to produce desirable outcomes. The concept is therefore built on the normative understanding of responsible leadership as caring for and responding to stakeholder concerns (Doh and Quigley 2014; Maak and Pless 2006; Stahl and Sully de Luque 2014; Waldman and Galvin 2008).

Second, our results show that responsible leadership is related to effective leadership, indicating the relevance of the concept. Contrary to critics who argue that leaders should not devote organizational resources to anything other than maximizing shareholder value (Friedman 1970; Jensen 2002), the study actually indicates that leaders who devote equal attention to primary and secondary stakeholders are perceived as more effective than other leaders and have positive effects on employee engagement. We show that such a stakeholder-oriented responsible leadership is more highly valued than purely shareholder-oriented leadership. Moreover, responsible leaders are able to elicit their employees' commitment to organizational goals and foster community engagement. Overall, the results indicate that responsible leadership may contribute significantly to creating win-win situations for organizations and their stakeholders and could thus help to address the challenges of organizing for CSR (Scherer et al. 2016).

The article's third contribution to responsible leadership research is to show the relation between relevant antecedents and responsible leadership behavior, an aspect called for by recent research (Stahl and Sully de Luque 2014). To the best of our knowledge, it is the first study to empirically test potential predictors of responsible leadership. Specifically, our studies show that it is the individual's ability to perceive the needs of others (based on his or her empathy) and the compulsion to consider those needs relevant (congruence with personal values, positive affect) that drives perceptions of responsibility and subsequently the performance of the three roles of responsible leadership. In particular, the strong relation between empathy and responsible leadership that we found in both study 1 and study 2 indicates that empathy enables a more balanced approach to leadership and causes leaders to care for multiple dimensions at the same time.

Finally, the study contributes to research on behavioral complexity in leadership (Denison et al. 1995; Hooijberg et al. 1997). It adds the dimension of the citizen to the repertoire of the behaviorally complex leader and indicates that the citizen, the role that emphasizes social-welfare obligations, contributes to leader effectiveness, employee engagement and positive stakeholder evaluations. This is an aspect that is often neglected in research but is likely to become increasingly relevant in a future where organizations are pressured to engage in CSR. In this regard, scholars have argued that behavioral complexity is conducive for engaging with paradoxical tensions that might arise due to competing stakeholder claims. Behavioral complexity enables the acceptance of paradoxical tensions (Smith and Lewis 2011), and behaviorally complex leaders can contribute to gaining and maintaining organizational legitimacy (Scherer et al. 2013). Behaviorally complex responsible leaders might more easily find ways to work around paradoxical tensions in that they cater to the various interests simultaneously and over time. This might mean that in certain situations they need to make either/or decisions, prioritizing one of their role-related obligations over the others, but over time, will give equal attention to all of the three roles. With our measure of responsible leadership, we capture in how far role-related behavior is equally balanced. Yet, we would encourage future research to investigate in more detail how the three-roles model of responsible leadership can help to cope with concrete paradoxical stakeholder tensions.

Perceptions of leaders' responsibilities are subject to changing societal expectations. We consider the three roles to provide a relatively stable heuristic for approaching the phenomenon of responsible leadership, because they are quite generic, but also because the roles are tied to enduring psychological perceptions of obligations. In our case, these are based on the psychological contract between employee and employer, the care for those one is entrusted with and a more altruistic care for broader social welfare (Alexander and Wilson 2005; Hernandez 2012; Rousseau 1990). What might change is the relevance attributed to each dimension, but also what is required to fulfil the obligations associated with each role. While we position our approach as normatively desirable and show positive implications of such a leadership style, we acknowledge that the normative expectations might change over time and would encourage future research to consider this.

Limitations and Future Research

To test our theory, we used a new measure of responsible leadership based on the theoretical logic of behavioral complexity. In study 1, the three roles of responsible leadership were operationalized by drawing on established scales. The confirmation of some of the results in study 2, where we

used a measure of responsible leadership based on coding of verbal responses, helped to triangulate results. Replicating results with different measures is a form of convergent triangulation, which yields evidence that the construct, not a specific measure, is driving the results (Turner et al. 2017). We would encourage future research to experiment with these measurements of responsible leadership to further validate and support its relevance in predicting relevant outcomes for the organization and society.

Furthermore, we would encourage future research to address the limitations faced by each of our studies. In study 1, we collected data from various sources; however, the relation between responsible leadership and employee outcomes was measured with the same survey. We conducted a Hausman test and used fixed-effects controls to account for the influence of potentially omitted variables specific to the organizations or the leaders in our sample (Antonakis et al. 2010). Moreover, we argue that the causal ordering we proposed among the constructs is substantively logical. Leadership research has convincingly demonstrated over time, in a variety of settings and including both field and laboratory studies, that supervisory leadership is more accurately predicting subordinate behavior, rather than vice versa. To further strengthen the confidence in our findings and to rule out potential endogeneity biases, we used an instrumental variable approach (Antonakis et al. 2010). The significant results of this robustness test indicate that endogeneity was not a major bias for our results and, thus, causality is likely to flow in the theoretically proposed direction. Nonetheless, we would encourage future research to replicate these findings of positive outcomes of responsible leadership.

Study 2 used scenarios and a sample of university students to test antecedents of responsible leadership. As the study was primarily designed to confirm the findings of study 1 and to further validate the measure of responsible leadership, we consider this a feasible approach. While we tried to mitigate the potential limitations of the think-aloud method, future research could use the method in various other contexts to further confirm its predictive validity. While study 3 used a sample of the working population and an experimental design to control for potentially confounding effects, it relied on scenario descriptions of responsible leadership. We therefore suggest conducting additional field studies that could, for instance, focus more closely on responsible leaders' decision making.

In our conceptualization, we focus on leadership roles that reflect typical patterns of behavior directed toward stakeholders. While this allows us to study the antecedents and outcomes of such behavior, it does not allow for a detailed investigation of the actual exchange process between leaders and stakeholders and how this eventually might shape leaders' and stakeholders' behavior over time. To study these interactions, we would encourage future research to

also conduct more in-depth, qualitative studies. Moreover, future research might investigate in how far leaders use the roles strategically to engage with stakeholders or blend role-related behavior and decision making to work around stakeholder tensions.

Finally, our model was developed from extant theory that was primarily developed in a Western context. In addition, even though our samples contained leaders from a variety of companies across industries, they shared a similar cultural background. While we believe that the three roles of responsible leadership are fairly transversal, because leaders' responsibilities toward the organization, their employees and broader society are also relevant in other cultural contexts (Witt and Stahl 2016), it would be important to further generalize our findings by conducting research that investigates responsible leadership in a range of organizational and cultural contexts.

Practical Implications

Companies could develop training programs to sensitize their leaders to the responsibilities entailed by the various roles. Leadership training could also provide guidance with regard to the behavioral repertoire each role might require. Furthermore, companies could select leaders based on their previous performance alongside the three roles, e.g., by inquiring about their contributions to organizational performance goals, their evaluations by subordinates and their community engagement. At the same time, companies should assist leaders in coping with the behavioral complexity of leading responsibly. Companies could for instance provide leaders with the managerial discretion that is needed to engage with various stakeholders, support leaders that show citizenship responsibilities and offer training on skills that help managers deal with multiple obligations. The results of our study suggest that empathy, positive affect and a universal value orientation can facilitate responsible leadership. A company can stimulate these individual characteristics, for instance, in that it offers service learning programs to its executives where leaders are confronted with contexts that evoke affective and emotional reactions (Pless et al. 2011).

Conclusion

We think that understanding what it needs to lead responsibly and what the implications of this understanding are is important in today's turbulent times. This article indicates some of the abilities and personal characteristics that facilitate leading with behavioral complexity and responsibility. Understanding these can provide a starting point for sensitizing and training individuals to become more responsible. Furthermore, understanding what leaders

might achieve by behaving responsibly can strengthen confidence in positive models of leadership, especially in times when trust in business is low. The results of the article indicate a positive influence of responsible leadership on the organization and society, and future research may continue along these lines to show the relevance of responsible leadership.

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Compliance with Ethical Standards

Conflict of interest All author declares that they have no conflict of interest.

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