The entanglement of leader character and leader competence and its impact on performance

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ABSTRACT

Whereas the micro- and macro-oriented leadership literatures have often studied leader competencies necessary for effective performance, the role of leader character in relation to competencies and performance has been to a large extent neglected. Our work seeks to shift the scholarly dialogue by introducing the concept of character-competence entanglement, which reflects the binding between character and competence over time. The highest degree of entanglement represents the deep and more persistent interconnection and mutually-reinforcing effect between highly-developed leader character and highly-developed leader competence, whereas in cases of low entanglement, character can be activated temporarily in a particular context to help strengthen the relationship between competence and performance. Our core proposition is that high character-competence entanglement will lead to extraordinary performance over time. In addition, we emphasize that relying on naturally-occurring learning opportunities and the processes of "learning-by-living" both outside and inside the organization will positively impact the development of character-competence entanglement.

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Leadership demands have been increasing, in part because of the increasing complexity and challenge of the global context in which leaders operate, but also in part because academics and practitioners continue to produce theories and approaches to leadership that seem to demand more of leaders. Current leaders in the workplace are thus expected to be able to develop the capacity to lead effectively across multiple levels, such as self, others, and organization, by fulfilling numerous roles and responsibilities (Crossan, Vera, & Nanjad, 2008). Whereas leadership development is a critical human resource priority for firms around the world (Strack et al., 2010) and is an active field of research (Day, Fleenor, Atwater, Sturm, & McKee, 2014), the latest business crises have led many to question whether we are missing critical elements of leadership in our discussions and, furthermore, whether what we are expecting of leaders is even possible (Gandz, Crossan, Seijts, & Stephenson, 2010). We build on prior research that points to leader character as essential but often overshadowed by leader competence, and describe how *entangling* character and competence—that is, binding them together through a series of events across time—produces the leadership we seek.

Numerous approaches to understanding and defining character exist (Wright & Huang, 2008). Moral character, for example, is associated with ethical behavior and ethical leadership (Cohen, Panter, Turan, Morse, & Kim, 2014), is normative, and captured in the language of good/bad, right/wrong, and should/ought (Bass & Steidlmeier, 1999). In contrast, we focus on virtuous character (henceforth character), which is concerned with the quality of judgment and decision making, and therefore is not limited to the

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domain of ethical decision making. Having sound judgment is an important aspect of effective leadership (Lawrence, Lenk, & Quinn, 2009), and while morality plays a role, so do other factors, such as the virtues of courage and temperance. Accordingly, the current research views character as a set of virtues that are universally considered to be important to well-being and excellence (Bright, Cameron, & Caza, 2006; Moore, 2005; Seijts, Gandz, Crossan, & Reno, 2015).

Leader competencies, on the other hand, represent the knowledge and skills necessary for effective leadership (Dragoni, Tesluk, Russell, & Oh, 2009; McCall, Lombardo, & Morrison, 1988; Quinn, Faerman, Thompson, McGrath, & Bright, 2015; Spreitzer, McCall, & Mahoney, 1997). When differentiating character from competence, we position competence as the ability to do something, whether due to natural talent or developed skill (or more often both), while character arises from habitual behaviors anchored in virtues and influences not only how competence is exercised, but whether it is exercised at all. As Hannah and Avolio (2010) state: "A leaders' character is defined not only by what the leader thinks but also by his or her motivation to act" (p. 292). Character, then, helps leaders to engage their competencies (e.g., Irwin, 2009) while also exercising judgment across contexts (Seijts et al., 2015; Yearley, 1990). Leading others, for example, includes competencies in motivation, teamwork, delegation, and contingent rewards (Mumford, Campion, & Morgeson, 2007), which are often discussed in business school programs and leadership development workshops in firms. A character lens places into question the effectiveness of these techniques in truly leading others when these competencies are not rooted in character dimensions such as humanity, justice, and temperance.

We seek to go beyond the independent roles of leader character and leader competence as they relate to performance outcomes to introduce the concept of character-competence entanglement. Whereas we concur with Hannah and Avolio (2011b) that "character and competence become the raw building blocks of effective and sustainable leadership" (p. 979), we also propose that merely possessing character and competence is insufficient; rather, they need to be deepened and developed together over time. We suggest that when character and competence are connected with one another in daily practice, they form a bond in which character increasingly becomes activated in a particular context alongside competence. "Character-competence entanglement," therefore, reflects the binding between character and competence, and exists in varying degrees depending on the level of competence, the depth of character, and the strength of the bond between them. In particular, the bond between character and competence is strengthened when it holds across time, different contexts, under pressure (when stress tested), and is exercised in a mindful way.

The core contributions of our theory are to: (1) go beyond the independent roles of leader character and leader competence as they relate to performance outcomes through the introduction of character-competence entanglement; (2) identify the importance of naturally-occurring, informal learning opportunities to the development of entanglement; and (3) incorporate temporal dynamics into our theorizing in order to highlight the dynamic nature of leadership (e.g., Shamir, 2011) and, particularly, of entanglement and performance. In establishing the boundaries of our theorizing, we propose that our model of character-competence entanglement applies not only to strategic leaders, but to all levels of leadership. Importantly, we embrace the view of leadership as disposition, not simply position, and character-competence entanglement is, therefore, important even for those without supervisory responsibility. It is not our intention to dissect each character dimension (e.g., humanity, courage) and how each one relates to competence; instead, we use them illustratively and focus on a holistic view of leader character. We conclude with a future research agenda to further advance both empirical and theoretical research on character-competence entanglement.

Leader character and competence

The role of character, not only in leadership but also in life, is something that has interested philosophers for centuries. Aristotle, for instance, argued that achieving excellent character is a prerequisite for attaining happiness and well-being in life, while Plato asserted that the character of leaders makes a large difference in whether or not they are able to rule effectively on behalf of the community (Williamson, 2008). While character has a long and deep history in philosophy and more recently in psychology (Seligman & Peterson, 2003), it has not been explicitly discussed as often in business (Crossan, Mazutis, Seijts, & Gandz, 2013b; Hannah & Avolio, 2011a; Seijts, 2013). However, the last decade has seen a surge of scholarly interest in character in organizational studies, especially as research related to virtuousness has burgeoned in the positive organizational scholarship field (Cameron, 2011; Cameron & Spreitzer, 2012). Despite these more recent efforts, there are only a few conceptual and empirical papers that have explicitly addressed both leader character and competence. As such, we build on existing work that may not use the label of character, but addresses aspects of character. Accordingly, our approach to character (and competence), described in the next sections, is not strictly dependent on a specific framework employed, and we draw from a variety of frameworks.

Deconstructing character

It is widely accepted that character is something that occurs within an individual, can be developed, and represents a higher-order construct composed of multiple dimensions (Hannah & Avolio, 2011a, 2011b; Quick & Wright, 2011; Wright & Goodstein, 2007; Wright & Quick, 2011). According to Peterson and Seligman (2004), there are six character dimensions: wisdom, courage, humanity, justice, temperance, and transcendence. These dimensions create a framework of character that "is not age or culturally bounded because its contents have been suggested throughout history and across cultures by philosophers and theologians and in a wide variety of major psychological theories" (Sosik & Cameron, 2010, p. 252). Recent research on character that extends Peterson and Seligman's (2004) framework and more closely aligns character to practicing leaders identifies 11 dimensions of

character: courage, humanity, justice, temperance, transcendence, accountability, drive, collaboration, humility, integrity, and judgment (Crossan, Seijts, & Gandz, 2015; Seijts et al., 2015). One key difference between these frameworks is that, in the eleven-dimension framework, the dimension of judgment—akin to Aristotle's notion of "practical wisdom"—is elevated, with all other dimensions interconnected to it, because judgment allows one to identify and understand the particularities of each situation (Crossan, Seitjs, Reno, Monzani, & Gandz, in press).

In the various character frameworks, each character dimension has a set of associated elements, which are the measurable group of related behaviors reflecting each of the dimensions (Peterson & Seligman, 2004; Sosik & Cameron, 2010). The elements of character are revealed in observable behaviors (Peterson & Seligman, 2004), which, according to Aristotle in the *Nicomachean Ethics*, are considered to be functional, adaptive, and prosocial. While all of the elements can be considered virtues, some have their origin in traits and others in values. For example, conscientiousness is a personality trait that represents one of the character elements of accountability. However, not every socially desirable attribute represents virtuous leader character. Instead, the character dimensions and elements have been carefully selected according to very specific criteria associated with virtuous leader behavior, such as fulfilling, intrinsically valuable, and nurtured by societal norms and institutions (Peterson & Seligman, 2004).

Character dimensions are ideally tightly inter-related (Seijts et al., 2015), and as character develops over time, the dimensions (and their associated elements) should become more integrated. With this in mind, a critical aspect of character is that every dimension can become a vice in excess or deficiency (Bright, Winn, & Kanov, 2014; Cameron, 2013). For example, developing justice without corresponding humanity can lead to a very dogmatic application of justice, and developing courage without temperance risks courage becoming recklessness. As a result, the dimensions of character do not exist in an inverted-U relationship with some median or average level of each dimension. Rather, the goal for leaders is to have a high level of character wherein all of the dimensions are highly developed and interrelated. Whereas a fulsome discussion of the integration of character dimensions is beyond the scope of this paper and overly complicates the current discussion, it is nonetheless important to acknowledge when deconstructing the concept of character.

Lastly, character is developed through a cycle of awareness, judgment, intent, behavior, and reflection (Alzola, 2012; Crossan, Mazutis, & Seijts, 2013a; McKinnon, 1999; Sadler-Smith, 2012), as well as through the integration of the various character dimensions (Crossan et al., 2013a; Rego, Clegg, & Cunha, 2012). This development of character is critical to avoid individual character dimensions becoming vices through deficiency or excess. As a result, we discuss the character dimensions more generally, but recognize that with each example provided, other character dimensions (as well as elements) are naturally implicated.

Defining competence

Our distinction between character and competence is consistent with work in political science, where political candidates are evaluated by voters on the separate dimensions of character and competence (Homer & Batra, 1994). In political science, competence consists of attributes such as intelligent, decisive, hardworking, and qualified, whereas character includes being friendly, warm, likable, honest, compassionate, and trustworthy (Garramone, Steele, & Pinkleton, 1991; Lodge, McGraw, & Stroh, 1989). This distinction between character and competence seems to suggest that character focuses on who/how/why leaders are, while competencies focus on what they can do. Our theorizing suggests, however, that it is the entangling of character and competence that ultimately determines what leaders do, and that a sole reliance on what leaders can do from a competency perspective misses the opportunity to identify and develop the critical links to one's character.

The extant literature has discussed an array of competencies that can help leaders navigate the increasing demands being placed on them (Conger, 2004; Crossan, Vera, & Nanjad, 2008; Seijts et al., 2015), though the typologies and classifications of competencies are rather varied and depend on context and purpose (Cardy & Selvarajan, 2006; Morales-Sánchez & Cabello-Medina, 2013). For example, Gentry and Sparks' (2012) cross-cultural analysis found resourcefulness, change management, and building and mending relationships to be important competencies while Spreitzer et al. (1997) included being insightful, having broad business knowledge, and having the ability to bring out the best in people, as important competencies. Whereas the necessary competencies may vary across different research studies, there has been convergence in this stream of research to suggest that leader competence represents the knowledge and skills necessary for effective leadership (Dragoni et al., 2009; McCall et al., 1988; Quinn, Bright, Faerman, Thompson, & McGrath, 2015; Spreitzer et al., 1997).

According to Quinn and Rohrbaugh (1983), effectiveness can be assessed according to a two dimensional spatial model with internally- versus externally-focused representing one dimension, and flexibility versus stability representing the other; this model is known as the Competing Values Framework (CVF). Building upon the CVF, Quinn et al. (2015) identified four groupings of competencies from an initial list of over 250 competencies that were "generated by mid-level and senior managers, administrators, union representatives, and scholars" (p. 19) that lead to effectiveness; some of the competencies represented in these four groupings include: organizing information flows, measuring performance, communicating effectively, managing constructive conflict, setting goals and objectives, managing execution, using power ethically and effectively, and fostering innovation.

In addition to Quinn et al.'s (2015) framework, other research has grouped competencies in terms of cognitive (e.g., pattern recognition), emotional intelligence (e.g., emotional self-awareness), and social intelligence (e.g., teamwork) competencies (Boyatzis, 2011), as well as people, organizational, business, and strategic competencies (Seijts et al., 2015). Thus, as with character, there are numerous frameworks available to understand leader competencies. It is not our intention to argue for a set list of competencies; rather our approach lends itself to the multi-level and broad range nature of leader competencies that exist for effective leadership (cf. Boyatzis, 1982). Also, a key observation is that many of the competency frameworks include dimensions of character. For example, Spreitzer et al. (1997) considered integrity to be one of the end-state competencies in their research

Table 1
A representative summary of character and competence in different leadership theories.

Leadership theory	Similarities with leader character	Differences with leader character	Competing-values-framework Competencies involved
Transformational leadership (e.g., Yukl, 1999) Builds commitment to organizational objectives and empowers followers to accomplish those objectives	Emphasizes vision, values and intellectual stimulation (Brown et al., 2005) **Virtues discussed**: Transcendence; collaboration; drive; integrity; humanity	Character is less focused on specific attributes necessary for influencing followers (e.g., charisma) and more focused on traits and values that ensure excellence **Virtues not discussed**: Accountability; courage; humility; temperance; justice	**Collaborate**: Communicating honestly and effectively; mentoring and developing others; managing groups and leading teams **Create**: Using power ethically and effectively; fueling and fostering innovation **Control**: Encouraging and enabling compliance **Compete**: Developing and communicating a vision; motivating self and others
Authentic leadership (e.g., Luthans & Avolio, 2003) Exhibits high self-awareness where actions are consistent with beliefs and values	Authentic leadership consists of "enduring qualities of character" (Shamir & Eilam, 2005) **Virtues discussed**: Humility; courage; integrity; transcendence	Character goes beyond self-awareness and consistency of actions and considers not just who a leader is but what a leader does **Virtues not discussed**: Drive; justice; collaboration, humanity; accountability; temperance	**Collaborate**: Understanding self and others; communicating honestly and effectively **Create**: Using power ethically and effectively **Control**: Encouraging and enabling compliance
Servant leadership (e.g., Spears, 2010) Focuses on the development of others, what the leader can do to help others, and the building of community within the organization	**Virtues discussed**: Humility; humanity; transcendence; collaborationi; justice	Leader character focuses on traits and values that lead to successful operation of the organization; hence is both people- and results-oriented **Virtues not discussed**: Courage; drive; integrity; temperance; accountability	**Collaborate**: Understanding self and others; communicating honestly and effectively; mentoring and developing others; managing groups and leading teams; managing and encouraging constructive conflict **Control**: Encouraging and enabling compliance **Create**: Using power ethically and effectively **Compete**: Setting goals and objectives; motivating self and others
Spiritual leadership (e.g., Fry, 2003) Values, attitudes, and behaviors that are necessary to intrinsically motivate one's self and others toward a sense of spiritual survival through calling and membership	Recognizes the role of self-awareness with a focus on vision and leader values and attitudes associated with altruistic love, hope, and faith **Virtues discussed**: Humility; integrity; humanity; courage; transcendence	Leader character focuses on traits and values that lead to successful operation of the organization (people- and results-oriented) as opposed to emphasizing outcomes of organizational commitment **Virtues not discussed**: Drive; collaboration; temperance; justice; accountability	**Collaborate**: Understanding self and others; communicating honestly and effectively; mentoring and developing others; managing groups and leading teams; managing and encouraging constructive conflict **Control**: Encouraging and enabling compliance **Compete**: Motivating self and others
Ethical leadership (e.g., Brown et al., 2005) Honest, trustworthy, fair, principled, care about people and society, behave ethically in personal and public life	**Key similarities**: Justice-oriented; integrity; humanity; courage	Leader character is more holistic and goes beyond setting ethical standards to leading followers with a results-orientation **Virtues not discussed**: Temperance; collaboration; drive; accountability; self-awareness	**Collaborate**: Communicating honestly and effectively; mentoring and developing others **Control**: Encouraging and enabling compliance **Create**: Using power ethically and effectively **Compete**: Setting goals and objectives
Responsible leadership (e.g., Maak & Pless, 2006) Focus on how a leader interacts with or views particular stakeholders (internal or external to the organization), and how leaders develop and cultivate trust among those relationships	**Virtues discussed**: Humanity; justice; collaboration; humility; integrity; accountability	Leader character emphasizes internal organizational processes and employees, and how best to lead from within **Virtues not discussed**: Transcendence; drive; temperance; courage	**Collaborate**: Understanding self and others; communicating honestly and effectively; mentoring and developing others; managing groups and leading teams **Control**: Organizing information flows; measuring and monitoring performance and quality; encouraging and enabling compliance **Create**: Using power ethically and effectively; negotiating agreement and commitment **Compete**: Developing and communicating a vision; setting goals and objectives; managing execution and driving for results

Table 1 (continued)

Leadership theory	Similarities with leader character	Differences with leader character	Competing-values-framework Competencies involved
Socialized charismatic leadership (e.g., Brown et al., 2005) Being an ethical role model and a part of something larger than oneself	**Virtues discussed**: Humanity; transcendence; justice; drive; collaboration; integrity	Leader character emphasizes the values and traits that lead to organizational success in terms of results and people. **Virtues not discussed**: Courage; temperance; accountability; humility	**Collaborate**: Understanding self and others; communicating honestly and effectively; mentoring and developing others **Create**: Using power ethically and effectively; championing and selling new ideas **Compete**: Developing and communicating a vision; motivating self and others
Leader behavioral integrity (e.g., Palanski & Yammarino, 2011) Defined as the perceived pattern of alignment between an actor's words and deeds.	**Virtues discussed**: Integrity; temperance; humility; humanity	Character is not grounded in a moral framework, but rather focuses on the values and traits of leaders that lead to excellence **Virtues not discussed**: Transcendence; collaboration; justice; accountability; courage; drive	**Collaborate**: Understanding self and others; communicating honestly and effectively **Control**: Encouraging and enabling compliance **Create**: Using power ethically and effectively **Compete**: Setting goals and objectives

whereas Seijts et al. (2015) identified integrity as a character dimension. As such, it will be important for future empirical research examining character and competence to recognize this type of construct overlap and to clarify the theoretical approach that is being used to measure these two constructs.

Character and competence in current leadership theories

Character and competence are both evident in current leadership theories. However, theorists tend to highlight some (and not all) aspects of these two constructs without explicit recognition of the distinction between character and competence or the theoretical underpinnings of character. Some leadership research, though, has explicitly linked character to leadership. For example, in their review of the leadership and virtue ethics literatures, Hackett and Wang (2012) found that six character dimensions were common to seven leadership styles: charismatic, ethical, moral, servant, spiritual, transformational, and visionary. In Table 1, we provide a representative summary of the connections between leader character, leader competence, and some of the different leadership styles and constructs in the extant literature.

Specifically, Table 1 includes more recent positive forms of leadership theories and constructs, such as authentic leadership (Luthans & Avolio, 2003), ethical leadership (Brown, Treviño, & Harrison, 2005), leader behavioral integrity (Simons, 2002), responsible leadership (Waldman & Galvin, 2008), and spiritual leadership (Fry, 2003). Because studies related to developing leader competence—in contrast to leader character—have been predominant in the management field (e.g., Conger, 2004; Galli & Müller-Stewens, 2012; Mumford et al., 2007), we chose to include positive forms of leadership in the table because these theories and constructs tend to address more aspects of character than other forms of leadership (e.g., transactional leadership). In addition, Table 1 includes the CVF (Quinn et al., 2015) and Seijts et al.'s (2015) frameworks of competence and character, respectively, in order to provide some representative examples of how these constructs currently exist in the leadership literature.

Whereas character and competence are evident in these forms of leadership, there is a lack of theoretical synthesis in the literature that brings these two constructs together in a meaningful way. For instance, the relationship between character and competence has some parallels with research on warmth (linked, for example, to kindness, empathy, and fairness) and competence as universal dimensions of a leader's social judgment (Cuddy, Glick, & Beninger, 2011). Competence and warmth are often seen as negatively related, particularly in the case of female leaders (Cuddy et al., 2011). As a result, many leaders are seen either as "competent but cold" or as "warm but incompetent." These stereotypes, however, neglect the broader set of character dimensions and the potential that virtues can become vices, and do not anticipate the potential for character-competence entanglement; as such, we introduce the notion of entanglement in order to illustrate how leaders can benefit from the binding of character and competence. Instead of character and competence simply representing raw building blocks of effective and sustainable leadership (Hannah & Avolio, 2011b) then, entanglement affords leaders the opportunity to connect character and competence to build extraordinary performance.

Conceptualization of character-competence entanglement

Most theories and studies of leadership have ignored the dimension of time, which limits the relevance of our current theories about leadership (Shamir, 2011). Shamir (2011) summarizes: "[…] in addition to issues such as the duration and evolving of leadership inputs, the duration and stability of leadership outcomes and the time lag between inputs and outcomes, which are raised by the dominant input–output paradigm of leadership studies, the relational perspective to leadership suggests that due to the reciprocal and dynamic nature of relationships, i.e. the fact that they develop or change over time through successive interactions,

Table 2
Degrees of character-competence entanglement.

Degree	Conditions for entanglement		Theoretical and temporal characteristics	Research implications	Methodological considerations
	Co-existence of character and competence	Binding of character and competence			
None			Strength of character is not activated. Competence dominates.	Missing a key construct which may have significant predictive power.	Failure to control for character may be overstating the role of competence in prior research.
Low	X		Character activated only at certain times/contexts. Co-existence occurs across time and space. Frequency of co-existence is irregular; duration and stability are short-lived.	Examine character as a moderator of the competence-performance link.	Character can be measured, competence can be measured and various priming studies could be used to examine the activation of character in contexts, and the augmenting effect of character. Longitudinal work is necessary to assess the dynamic relationship between competence and character.
High	X	X	Character robust across time/contexts. Co-existence occurs at the same time and space. Frequency of binding is recurrent; duration and stability are persistent.	Use of the DNA metaphor. Examine the rich connectivity between character and context that fosters the kind of robustness in high entanglement over time.	Lends itself to rich ethnographies that reveal the factors that foster such entanglement as well as the factors that may undermine it. In quantitative work, a scale for entanglement can be developed that captures the bond between competence and character. Longitudinal work is necessary to assess the dynamic relationships among competence, character, and entanglement.

important leadership phenomena cannot be understood from an a-temporal viewpoint" (p. 311). In creating a theory of character-competence entanglement, we conceptualize it, not as a stable characteristic of a leader, but instead as something that can be continuously developed or eroded over time. As a result, there are a number of different forms or degrees associated with entanglement, such as being low on character and high on competence or being high on both but not having them connected with one another. Each form of entanglement has different temporal implications. With this in mind, we take a gestalt perspective on entanglement in the current research and describe three degrees of entanglement: no entanglement, low entanglement, and high entanglement, as summarized in Table 2. We also include research implications and methodological considerations in this table to aid in the conceptualization of entanglement, but will discuss these in more detail when we later present our agenda for the development and measurement of the entanglement construct.

As shown in Table 2, the first scenario is that of "no entanglement". In general, this scenario represents leaders with highly-developed competence but underdeveloped character. For example, in his book, Irwin (2009) described how leaders may be highly competent in their jobs but can derail due to character deficiencies. For example, Steven Heyer—the former executive of Starwood Hotels and Resorts—was described as "doing right by fiscal standards" but "losing touch with the people he was leading" (Irwin, 2009, p. 61). Although Heyer was a competent executive and brought tremendous growth to the firm in a few years, he eventually left the company amidst sexual harassment accusations. Heyer's arrogance during the allegations and his detachment from others hastened his derailment (Irwin, 2009). Also in this scenario, leaders may choose to rely on competence at a particular time or in a particular context, and may subsume their character in favor of what they believe to be the demands and expectations of organizational life; as Katz and Kahn (1978) point out, employees come to work in a state of role-readiness wherein they may comply with requests that violate many of their own values.

The second scenario is that of "low entanglement," which we characterize as character and competence coexisting, but not being bound to each other. In this scenario, character and competence coexist (as opposed to being entangled) across time and space; that is, there are times and places where leaders tend to activate their character, and times and places where leaders primarily exercise their competence. When there is a low degree of entanglement, character and competence act independently when making decisions. For example, in some conditions, leaders would consider a decision from the perspective of character dimensions, such as integrity, and could ask themselves if the decision is consistent with "the type of person I want to be." In other conditions, leaders would primarily consider their decisions based on their professional experience and expertise, and could ask themselves if the decision is primarily consistent with shareholder-value maximization and quarterly targets. Conceptually, we characterize this coexistence (without the binding) as an interaction effect. In the scenario of low entanglement, character can enhance the performance effects of competence at a specific point in time, but this effect will eventually erode because the two are not strongly bound together.

The third scenario is that of "high entanglement," which we define as the deep interconnection and mutually-reinforcing effect between highly-developed leader character and highly-developed leader competence. High entanglement is characterized not only by coexistence, but by a strong binding between depth of character and strength of competence. When the degree of

Table 3
The WH-questions of entanglement.

What (description)	• The degree of entanglement varies with the number and range of character dimensions and competencies that are linked.
How (description)	• The naturally-occurring learning opportunities described in our propositions are antecedents of how a high degree of entanglement may be reached.
Why (explanation)	• The virtues associated with character have a self-reinforcing effect on other virtues and competence. Thus, the more leaders activate on character, the more they can deepen their character as well as strengthen their competence.
Who (context)	• The degree of entanglement varies depending on whether an individual associates character with some specific identities (e.g., parent, spouse, manager, shareholder), versus character being core to one's identities and, therefore, being entangled with competence in a more robust way across identities.
Where (context)	• The degree of entanglement varies depending on whether character is simply activated (e.g., training workshop) or primed (e.g., job interview) and is not consistently applied across contexts, versus the bond between character and competence being robust across contexts and pressures (e.g., stress, time pressure, money priming, and power).
When (context)	• The degree of entanglement varies with the frequency and duration of the binding of character and competence over time.

entanglement is high, character and competence can both be leveraged in virtually any context and at any time with leaders exercising character in their daily life, including work activities where expertise and competence are usually exercised (e.g., downsizing in a compassionate way, leading in a humble way, taking risks in a courageous way).

The notion of a high degree of entanglement is consistent with the view proposed by Crossan et al. (2013b) in which they describe the need for strength of character to handle the situational pressures exerted by various contexts. When character and competence are entangled, the leader's character helps to enlighten the use of competence, and competence simultaneously informs the use of character; when entangled, the relationship is reciprocal and dynamic. For example, a character perspective of motivation guides leaders to think about humanity and transcendence when motivating followers. A competence perspective of integrity recognizes that integrity is not an "ideal" or a "moral characteristic" because competent leaders understand the business challenges and business context that support or hinder integrity. In these examples, character and competence are activated and exercised at the same time and in the same space.

A useful metaphor to describe the binding between competence and character is the "helix effect" that is often observed in the natural world. In particular, we see high entanglement as having many similarities with the structure of DNA. Most DNA exists in a double helix form in which two linear, biopolymer strands are connected to one another through complementary base pairings, and are wound around one another (demonstrating the intertwined nature of DNA). These base pairings are formed between purines (e.g., Adenine & Guanine) and pyrimidines (e.g., Cytosine, Thymine, & Uracil), which are held together by hydrogen bonding (Reusch, 2013); for example, Adenine tends to bind with Thymine, and Guanine tends to bind with Cytosine. Together, these base pairings "fill in" the space between the two strands of DNA and, overall, create a unique molecule that is vital to the functioning of living organisms.

We see leader character and competence acting as the two linear strands of DNA which become intertwined when character dimensions (and elements) "bind" with (i.e., are activated alongside) competence in practice, similarly to how purines bind with pyrimidines. For instance, Greenberg (1990) found that theft rate amongst employees in manufacturing plants who experienced a pay cut was reduced when the pay cuts were explained in an honest and caring manner. Hence, being competent in communication and having humanity (a character dimension) enabled leaders to successfully communicate a challenging decision to their employees. We believe that the base pairing between humanity and communication, in this particular example, provides a foundation for other character dimensions and competencies to reinforce and build on one another across time, with practice. In the remaining sections, we provide insight into how entanglement is developed, and why this binding between character and competence ultimately leads to extraordinary performance.

The WH-questions of entanglement

As we consider varying degrees of entanglement, there are several important theoretical and temporal underpinnings that we anchor in Whetten's (1989) textual details of *What*, *How*, *Why*, *Who*, *Where*, and *When* to help unpack this phenomenon. Table 3 summarizes the WHs of the entanglement phenomenon. According to Whetten (1989), the WH-questions of What, How, and Why provide the description of, and explanation for, a theory (i.e., they provide the essential ingredients of a theory). The WH-questions of Who, Where, and When pertain to context (including identity, space, and time), which is also important to the conceptualization of entanglement. In addition to unpacking the degrees of entanglement in plain language, we see these WH-questions as laying the foundation for ways to study character-competence entanglement, supporting concrete recommendations and a roadmap for future research.

What

The What-question describes what character-competence entanglement is: the binding of character and competence in practice so that leaders can achieve extraordinary performance over time. Character and competence are both multidimensional, thus, their binding could be seen as a complex matrix of pairwise combinations. However, as we discussed earlier, character dimensions are ideally tightly inter-related so that when character-competence entanglement is high, the binding between the two constructs is more holistic, as represented by the DNA metaphor, and not based on specific pairs of character and competence dimensions.

In contrast, when entanglement is low, character and competence coexist with one another (at varying levels) but are not bound. For example, Zollo (2009), who studied mergers and acquisitions (M&A), found that prior experiences and experience accumulation in M&A enhanced both competence and confidence (an element of courage) in organizations, but their development can be asymmetric. When competence developed faster than confidence, leaders experienced "humble" learning. When confidence developed faster than competence, leaders experienced "superstitious" learning. In these cases, when the rates of development of confidence and competence were not balanced, leaders suffered from not knowing that they know, or from overconfidence in what they do know (Zollo, 2009). This scenario captures a low degree of entanglement because the development of character and competence are not bound together. In low entanglement, character is frequently and briefly "called upon" to interact with competence to increase performance, but this effect on performance will eventually dissipate once character is no longer activated alongside competence.

How

For Whetten (1989), the How-question is descriptive in nature and illustrates how the variables of interest are related to each other, which we depict in our Fig. 1. As previously stated, low entanglement can be conceptualized as character interacting with competence at times to increase performance. For high entanglement, inductive approaches or longitudinal evidence will need to be collected to demonstrate that character and competence are not only highly developed but that they are also deeply interconnected with one another, and how this interconnection leads to extraordinary performance over time. We address the How question in detail in the next section when presenting our propositions on how naturally-occurring learning opportunities act as possible antecedents of character-competence entanglement.
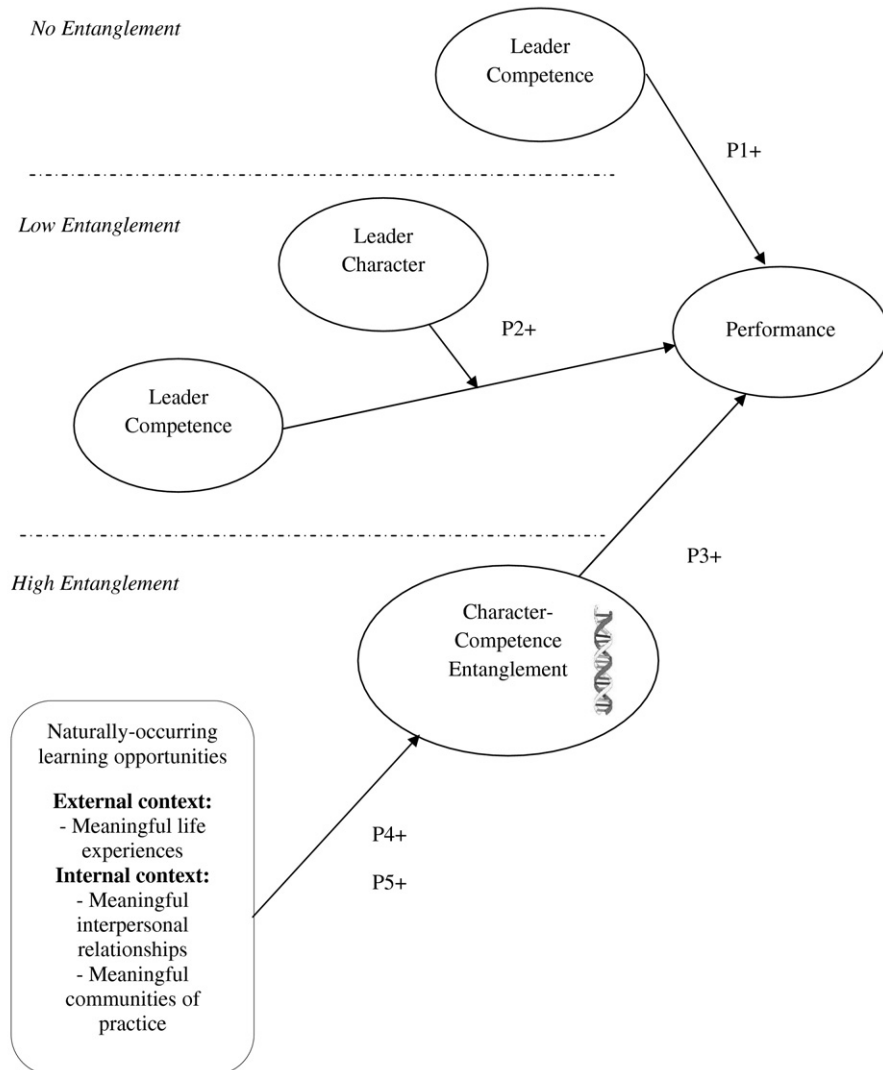

Fig. 1. Antecedents and effects of character-competence entanglement.

Why

The Why-question focuses on explanation and provides the "glue" and rationale that holds the theory (and model) together (Whetten, 1989). In our theorizing, this question considers the actual process of entangling character and competence and considers why a leader would choose to entangle the two. Character-competence entanglement involves processes through which virtues strengthen other virtues and also competencies. Cameron (2011), for instance, asserted that observing and experiencing virtuousness produces an elevating effect and a self-reinforcing inclination toward more of the same. In addition, Fredrickson's (2003) work found that employees' and organizations' social, intellectual, and emotional capacities, and modes of thinking and action, were expanded and increased as a result of experiencing and observing virtuousness. Furthermore, according to Wedin (1997), the habitual performance of virtuous actions can eventually lead to an inclination to choose them in harmony and with pleasure, which results in the ability to act virtuously.

One of the main reasons as to why the virtues evident in leader character can have this amplifying effect is because together, they serve as an enabler of self-reflection (Crossan et al., 2013a). For example, leaders with highly developed humility, which is "a realistic assessment of one's own contribution and the recognition of the contribution of others, along with luck and good fortune that made one's own success possible" (Solomon, 1999, p. 94), are better positioned to reflect on, and to evaluate success, failure, work, and life without exaggeration (Vera & Rodriguez-Lopez, 2004). Humble leaders, therefore, embrace the development of competencies they may be lacking. Yet, humility is not enough. Character dimensions are inter-related such that having transcendence (being purposive, appreciative, etc.) enables the leader to stay the course for what could be a painful journey of development. Hence, whereas competence is important to effectiveness, the self-reinforcing properties evident in character, when bound to competence, are what enable extraordinary performance to be achieved.

Who

The Who-question deals with consistency across identities, which also plays a role in determining the degree of entanglement achieved. Literature pertaining to identity suggests that different contexts might activate a different identity in people (Alexander & Knight, 1971; Aquino, Freeman, Reed, Lim, & Felps, 2009; Hogg, Terry, & White, 1995). For example, Aquino et al. (2009) found that moral identity was activated when individuals recalled or read the Ten Commandments, leading to motivation to act morally. In addition, a CFO may activate character and apply competence differently at church than when he or she views his or her manipulation of accounting rules as amoral and fails to activate important dimensions of character such as justice (for who) and humanity (implications of the decisions being made beyond current shareholders).

When entanglement is low, character is not core to one's identity as a working professional (e.g., the CEO-identity, or the manager-identity) and thus, may not be activated at work. Organizational norms, for example, can sometimes discourage the expression of character (e.g., integrity, transparency, and justice) when they set goals and incentives to promote a desired behavior at work, but they encourage a negative one; that is the case of ill-conceived goals, such as the pressure to maximize billable hours in accounting, consulting, and law firms, which leads to unconscious padding (Bazerman & Tenbrunsel, 2011). When entanglement is high, character is core to one's identity, and becomes more robust and is therefore more likely to be exercised along competence in any context.

Where

The Where-question deals with consistency across contexts, which helps determine the degree of entanglement achieved. When entanglement is low, there is a context (place) to exercise character, but otherwise, competence is prioritized. One important characteristic of character is that it can be latent in individuals, and activated, or eroded, in work contexts (Hannah & Avolio, 2011a; Tett & Burnett, 2003). We posit that activating character is vital to entanglement but there are certain organizational factors, such as stress, time pressure, money priming, and power (e.g., Vansteelandt, 1999; Vohs, 2015), that can disrupt its binding to competence. As a result, the activation of competence occurs much more frequently than that of character. In contrast, when entanglement is high, the binding of character and competence is robust across different contexts and notwithstanding contextual pressures too.

A large body of literature focusing on manipulating context presents serious challenges to the expression of character in organizations and, consequently, to the possibility of high character-competence entanglement. This is clearly shown in Zimbardo's (2007) work on the conditions under which good people do bad things, which he termed the "Lucifer Effect". In his Stanford Prison Experiment, he set up a mock prison, randomly assigning students to roles as prisoners and guards. He had to shut down the prison after five days because the guards began to abuse the prisoners. Zimbardo (2007) concluded that "situations matter," the line between good and evil is not fixed but permeable, and factors such as situational power, and the power of rules and roles, can transform individuals' personality and character in unexpected ways.

When

The When-question deals with consistency over time, which helps determine the degree of entanglement achieved. More specifically, a temporal dimension of entanglement centers on the binding of character and competence over time and how temporary or persistent that binding is. The more frequently character and competence are activated alongside one another in practice, and the longer the duration of the binding, the stronger the binding between them becomes. Referring back to the DNA metaphor, the base pairings between the purines and pyrimidines fill in the space between the biopolymer strands of DNA, lending itself to a tight spiral quality. As character and competence consistently (and often) bind together in practice, the more this helix shape takes effect.

In their review of time in theory development, Mitchell and James (2001) discuss a number of configurations (i.e., X-Y relationships) to illustrate how time is represented in causal relationships. Specifically, they call researchers to "seriously consider issues of time, especially when events occur" (p. 545) and offer eight configurations of how time is incorporated in organizational theories. Mitchell and James' Configuration 6 best captures the spiraling pattern that occurs between character and competence because it suggests that as one of the two variables in a relationship changes, this change causes the other variable to change too (i.e., their Configuration 6 states: "X causes Y, which causes a changed X, which causes a changed Y"). In other words, leaders with highly developed character will proceed to develop competencies that they see they lack. The development of these new competencies, then, contributes to new levels of confidence, courage, and self-awareness for instance. Thus, in describing entanglement as a process, we recognize that the relationship between character and competence is dynamic and that changes in the depth of character will lead to changes in the strength of competencies, and vice versa.

We expect the binding between character and competence to be more temporary in the case of a low degree of entanglement and that it would be more persistent in the case of a high degree of entanglement. For example, events that trigger the activation of character such as character primes (e.g., a job interview or a promotion opportunity), can augment competence in the short term, which facilitates entanglement. However, the bond created between character and competence during this time may be temporary and can erode if character is not continually activated alongside competence.

To summarize our WH-questions on entanglement, the binding between character and competence that is reflected in character-competence entanglement occurs in context, can be high or low, and requires a temporal and dynamic perspective in order to be fully understood. We continue to address the theoretical nature of character-competence entanglement in the next section as we discuss propositions related to the outcomes and antecedents of entanglement. Using insights from Mitchell and James' (2001) configurations, we describe the dynamic aspect (i.e., longitudinal relationship between two variables, Pitariu & Ployhart, 2010) of the entanglement process to demonstrate the importance of temporal theorizing to the entanglement construct, and to provide researchers with more precise propositions to help in the empirical testing of entanglement.

Outcomes and antecedents of character-competence entanglement

Fig. 1 shows the propositions included in our model, which postulate the performance implications of the three degrees of entanglement previously discussed.

No entanglement (i.e., competence only) and performance

As previously mentioned, leader competence—compared to leader character—has been more extensively studied in the extant literature (Hannah & Avolio, 2011b; Wright & Goodstein, 2007; Wright & Quick, 2011). In general, competencies, skills, and abilities are favorably valued in leadership research: "being low on a given ability will never be judged a good thing" (Tett & Burnett, 2003, p. 512) and if a leader does not have the skills or knowledge to complete the task (i.e., competence), then the leader simply cannot perform well (Boyatzis, 1982; Conger, 2004; Dragoni et al., 2009). In a sample of approximately 57,000 managers, Cameron, Quinn, Degraff, and Thakor (2006) tested the relationship between each of the groupings of leader competence based on the CVF and firm performance and found positive correlations of 0.31 for control-competencies, 0.32 for collaborate-competencies, 0.33 for compete-competencies, and 0.35 for create-competencies. These authors argued that the most effective managers have at least average competency on leadership skills in all four groupings.

The relationship between competence and performance is illustrated by Mitchell and James' (2001) Configuration 1 ("X causes Y") where competence causes, and temporally precedes, performance. As Boyatzis (2006) demonstrated in a study of an international consulting firm, the timing of when competence can be used to enhance performance depends on the organizational environment. In addressing tipping points in the competence-performance relationship, Boyatzis asserted that the office manager of a strategy consulting firm would need to be using the competence of adaptability 'frequently and consistently' while the manager of a basic chemical processing plant may be using it only 'occasionally.' Whereas performance may follow immediately or sometime after competencies are enacted (in fact, Shamir (2011) argues that time lags in leadership research tend to be arbitrary and based on convenience), there is evidence to suggest that competence is positively associated with performance. Hence,

Proposition 1. Leader competence [alone] will be positively associated with performance.

Low entanglement and performance

Although competence is related to performance and represents one of the fundamental building blocks of effective leadership, research has increasingly suggested several shortcomings of focusing solely on competence. For instance, Lawrence et al. (2009) state that one of the limitations of the CVF is that it does not connect these competencies to the judgment of when they are appropriate. In addition, highly competent and business savvy leaders with weak character (e.g., low integrity, accountability, or temperance) may engage in actions that have immediate positive effects but have negative long-term consequences for companies (Irwin, 2009). Examples of these actions are outright fraudulent action, mortgaging the future through reduction of R&D, claiming success for someone else's results, mischaracterizing products or services, or leveraging the success of prior leadership. Furthermore, learning from failure, which is an important part of the learning and development process, is more difficult for

highly competent individuals who lack character dimensions such as humility, courage, and transcendence. When studying negative emotional reactions to project failures, Shepherd and Cardon (2009) proposed that the need for competence increased the intensity of the negative emotion and interfered with learning, while self-compassion (self-kindness, common humanity, and mindfulness), lead to less interference with learning processes.

In recognizing possible shortcomings of a competence-only lens to leadership development, we propose that character can enhance the relationship between leader competence and performance. In particular, even a low degree of entanglement, where character can temporarily act as a moderating variable, is enough to enhance the effect that competence has on performance, even if the enhancing effect is also temporary. However, many equate character with being "nice" or "soft," and immediately disconnect character from economic success and competitiveness. As Anderson (1997) points out, "despite discussion in the popular and academic press, the connection between value judgments and economic success is still unclear in the minds of many executives" (p. 25). However, Cameron, Bright, and Caza (2004) found that firms whose members possessed more character dimensions outperformed those whose members possessed fewer character dimensions. Furthermore, the character strengths of integrity, bravery, and social intelligence were each found to account for variance in executive performance above and beyond direct reports' ratings of executives' developing and empowering behaviors and other control variables (Sosik, Gentry, & Chun, 2012).

Character dimensions have also been associated with performance on creative tasks (Avey, Luthans, Hannah, Sweetman, & Peterson, 2012), outstanding leadership (Sosik, 2006), and executive selection criteria for top-level positions (Hollenbeck, 2009). Following Mitchell and James' (2001) Configuration 8 ("X causes Z, but the strength of the relationship varies as a function of the level of Y"), we recognize a dynamic relationship between entanglement and performance. In the case of low entanglement, considering that its duration is more temporary, this may lead to an amplifying effect on performance but this effect may erode. That is, we expect character to enhance the effect that competence has on performance, even though this moderating effect may only be temporary—the level of performance will eventually go back to its baseline level, if/when character is not continually activated alongside competence. Hence,

Proposition 2. Character [temporarily] moderates the positive relationship between competence and performance, such that, when character is high, the relationship between competence and performance is [temporarily] stronger.

High entanglement and performance

Moving from a low degree of entanglement to a high degree, the bond between character and competence is strengthened because character is more likely to be activated alongside competence in a particular context, and leaders are also deepening their character and strengthening their competence in the process. When character and competence are entangled, their development process is reinforcing and they have a reciprocal dynamic relationship with each other, that is, leaders can develop their character by exercising their competence and can also continually develop their competence by activating their character—both of these processes are anchored in practice (Day, 2010). For instance, whereas humble leaders embrace the development of competencies they may be lacking, competent leaders simultaneously realize the gaps in their expertise and seek advice from others, further developing the character dimension of humility. The ability to develop competencies in leading self, others, and the organization depends on a foundation of character, and character is tested and stretched through the daily practice of competence in leading across levels. In fact, detriments to learning—skepticism, cynicism, busy work, and reward systems focused primarily on financial results—may impede the effectiveness of the leader (i.e., can decrease competence) but can create opportunities for character development (e.g., Inyang, 2013).

A few empirical studies have considered character alongside competence. In qualitative work, Schilling (2009) identified lack of leader abilities and lack of character as individual-level antecedents to negative leadership, that is, ineffective and destructive leadership behaviors counterproductive to organizational success. In quantitative work, Sosik et al. (2012) built on Peterson and Seligman's (2004) classification of virtues, and performed exploratory analyses to compare the effects of four traditional executive competencies (sound judgment, strategic planning, results orientation, and global awareness) to four character dimensions (integrity, bravery, perspective, and social intelligence). They found that the four traditional executive competencies explained more variance in executive performance (46.5%) than the four character dimensions did (36.5%). Interestingly, judgment is considered a competence in Sosik et al.'s (2012) study, whereas it is considered a character dimension in Crossan and colleagues' (2013a) framework.

The preceding discussion provides some empirical evidence of how the combination of character and competence can lead to extraordinary performance, which is akin to Cameron's (2012) positively deviant performance because the leader is operating outside of the norm (or what is considered ordinary or expected). When character and competence are robustly connected to one another (i.e., a high degree of entanglement exists), then the duration of entanglement is more persistent, which leads to more sustainable levels of this extraordinary performance. As captured in Mitchell and James' (2001) Configuration 5 ("X causes Y, and then a changed X causes a changed Y", which they describe as a pattern in which "systematic changes in X over time will lead to systematic changes in Y over time," and is associated with evolutionary and developmental approaches), as entanglement shifts to a higher degree, the leader's performance will not only be extraordinary, but this effect will occur over time. Hence,

Proposition 3. High character-competence entanglement will be positively associated with extraordinary performance over time.

Naturally-occurring learning opportunities and entanglement

Context plays a vital role in character-competence entanglement. As part of the context, naturally-occurring, informal learning opportunities help facilitate the binding between character and competence. Specifically, these opportunities encourage the development of character, which is necessary because the workplace often provides formal learning opportunities to aid the development of competence. Our interest in how leaders learn to develop and entangle character and competence has several aspects in common with the leadership development literature, but also some notable differences. Day (2000) differentiated leader development from leadership development: the former is about developing individual human capital, while the latter also includes social capital structures, networks, relationships, and shared representations associated with leadership. In this sense, our theorizing goes beyond building individual self-awareness to also addressing relationships between leaders, members, and structures supporting leadership.

In developing leaders, organizations tend to underemphasize informal learning opportunities associated with learning to lead in favor of the usual formal opportunities (cf. Lave & Wenger, 1991), such as 360-degree feedback, mentoring, and job assignments (Day, 2000). Because learning is situated within activity, context, and culture (Lave & Wenger, 1991), leaders can also develop the capacity to lead through the use of naturally-occurring learning opportunities. These informal opportunities share some of the principles of action learning, where "leaders learn from challenging work, from solving complex problems, and from leading a team, and [...] use this knowledge to foster team communication and enhance team performance" (Hirst, Mann, Bain, Pirola-Merlo, & Richver, 2004, p. 321). We see two distinctions between action learning research and our approach. First, our focus goes beyond the team (or others) level to also examine leading the self and the organization. Second, our view of learning 'by doing' is more accurately described as learning 'by living' in that we highlight learning opportunities arising from past and present experiences at work and life events outside of work. Thus, whereas we agree with action learning about the value of reflection on work experience and the value of learning through working on real-time work problems (Raelin, 2001, 2006), we see learning from life experiences outside of work as also key for learning to lead.

One common theme emerging across the leadership development literature is the notion of learning from past job (work) experience, where work experience refers to relevant skills and knowledge acquired while holding past jobs that may be relevant to one's current job. For example, McCall (2010) argues that experience—not genetics, not training programs, not business school—is the primary source of learning to lead, and McCauley and Brutus (1998) state that development through job experiences pertains to how individuals learn, undergo personal change, and acquire leadership capacity as a result of the roles, responsibilities, and tasks encountered in their jobs. We extend the concept of "learning from experience" to "learning from life." Consequently, learning to be a leader who entangles character and competence includes the transfer of knowledge from meaningful experiences—those that are purposeful and significant (Pratt & Ashforth, 2003)—outside the firm, that is, impactful personal life experiences (e.g., passion for a sport, a family death, raising children with special needs, personal involvement with a charity), as well as from experiences inside the firm (e.g., communities of practice). These informal opportunities do not have to be "given" to individuals, but rather supported by leaders. In the process of engaging in these learning opportunities, leaders can simultaneously develop and connect their character to competence over time. This perspective deviates from the dominant input-output paradigm of leadership and is consistent with the view of leadership as a relationship and as a dynamic process (e.g., Shamir, 2011).

Learning from the outside context: life experiences

Research demonstrates a difference between socialized (other-focused) leaders and personalized (self-focused) leaders that can be explained by the type of events they were exposed to as they were growing up. Ligon, Hunter, and Mumford (2008, p. 329) found that individuals who "experienced more events that solidified or anchored their internal values" as well as "had negative experiences that later took on a positive or beneficial interpretation" were more likely to become socialized leaders in their adult lives. This kind of learning from life experience is consistent with the concept of learning by analogy, involving the transfer of knowledge from a familiar domain (the base) to a more novel domain (the target) (Gentner & Holyoak, 1997). Basically, when faced with something unfamiliar, leaders attempt to understand it by relating it to something familiar.

A key assumption of analogical learning theory is that domains related in some respects are likely to be related in other respects as well (Gregan-Paxton & John, 1997). In strategy, analogical reasoning supports managerial cognition because it emphasizes aspects of strategy making, including pattern recognition, judgment, and even wisdom (Gavetti, Levinthal, & Rivkin, 2005). Whereas analogies vary in their quality and contingencies are to be considered, the power of analogy to create similarities enables it to be an instrument for an array of purposes (Gentner & Holyoak, 1997), including helping leaders to develop and entangle character and competence. Leadership is constructed not just in the workplace, but also in non-work arenas, such as restaurants, golf courses, clubs, and private residences, that is, in social life as well as economic life (Sjöstrand, Sandberg, & Tyrstrup, 2001). Thus, the habits leaders develop in their homes and communities can be quite revealing of their character. Similarly, childhood events or playing sports during early stages of life can entangle character and competence by encouraging a sense of discipline, ambition, and teamwork that nurtures successful leadership. In fact, Simonton (1994) demonstrated that early incidents of trauma, such as parental loss, poverty, or physical or mental disability, were prevalent in the early lives of great leaders.

These meaningful life events hold significance and positive meaning for the leader (Pratt & Ashforth, 2003; Rosso, Dekas, & Wrzesniewski, 2010) and enable leaders to expand their independent judgment and decision making (who they are and why they are making certain decisions), which is critical to character-competence entanglement and to the change from lower to higher degrees of entanglement. As leaders activate their character and improve their understanding of who they are, they will

also seek to develop the necessary competence to be effective. Business contexts in general tend to strongly socialize (and reward) leaders toward the development of competency. Meaningful (to the person) life experiences external to work represent a key opportunity for leaders to enrich their perspectives, goals, and values. Connecting one's life to the organization will also strengthen one's commitment to lead, which transcends the organization and links leadership of the self to all roles. As a result, character gains relevance, and informs more deeply the leadership decisions previously based primarily on competence. As this process is practiced over time, entanglement emerges and develops from lower to higher degrees. Hence,

Proposition 4. Meaningful life experiences are positively related to change in character-competence entanglement over time.

Learning from the inside context: Communities of practice and interpersonal relationships

The notion of learning by analogy from life experiences can be expanded to include not only the context outside of work, but also the context inside work. Leaders have dynamic relationships not only with individuals, but also with collectives (Shamir, 2011). Informal learning opportunities arise from any interpersonal relationships at work, including peers and followers. Communities of practice are also particularly rich contexts for naturally-occurring learning opportunities to emerge (Johnson, Melin, & Whittington, 2003; Whittington, Molloy, Mayer, & Smith, 2006), and are defined as "groups of people who share a concern, a set of problems, or a passion about a topic, and who deepen their knowledge and expertise in this area by interacting on an ongoing basis" (Wenger, McDermott, & Snyder, 2002, p. 4). Lave and Wenger (1991) proposed communities of practice as a different approach to understanding learning, which focuses on informal and situated social interaction, rather than on a planned, mechanistic process of cognitive transference. Such interaction results in motivated learning of what is needed to be known about the complexities of real practice (Cox, 2005).

Communities of practice can be phenomenologically understood as relational structures that are mediated by and through the social construction of knowledge (Koliba & Gajda, 2009). A community of practice is similar to the Japanese concept of *ba* (place, space, or field), described by Nonaka and Takeuchi (2011). *Bas* are contexts where relationships are forged and interactions occur, and include project meetings, training programs, ad hoc study groups, informal hobby groups, conferences, company-sponsored family or sports events, cafés and canteens, virtual meetings, intranet systems, and blogs (Nonaka & Takeuchi, 2011).

According to Aristotle, character is not formed on one's own but is something that requires relationships and community (Wright & Goodstein, 2007). In fact, Aristotle affirmed that who we are, at home and at work, depends on the habits we have created by being around great people. Moreover, competencies, especially those related to a leader's social role, can be developed through teamwork (cf. Hirst et al., 2004). As in the case of life experiences, informal relationships and communities at work that are significant and hold positive meaning for the leader (i.e., are meaningful) represent a key opportunity for leaders to share their personal perspectives, goals, and values, and enhance their sense of connectivity. Again, despite the strong emphasis on competence in business settings, character gains relevance, and informs more deeply leadership decisions previously based primarily on competence. As this process is practiced over time, entanglement emerges and develops from lower to higher degrees. Hence,

Proposition 5. Meaningful (a) communities of practice and (b) interpersonal relationships at work are positively related to change in character-competence entanglement over time.

Implications for research and practice

The ultimate motivation behind this research is to address the growing gap between the internal and external demands being placed on today's leaders and their capacity to deliver on those demands. Given the intricacy of leading oneself, others, and the organization" (Crossan et al., 2008), the capacity to lead at these levels could be seen as a daunting undertaking. We propose that leaders can actively pursue character-competence entanglement in order to fulfill the roles and responsibilities being placed on their shoulders. In particular, we theorize about the positive impact of leader character and competence—when interconnected—on performance outcomes over time. In this sense, we seek to motivate a change in our scholarly dialogue in management and the search for a new theory of character-competence entanglement, which reveals both a recasting of the meaning of competence and a new focus on the role character plays in learning to lead. We are aware that elevating character alongside competence dictates the need for measures and a research agenda that encourages researchers to consider incorporating character-based theory and measures in their work. We first address the measurement of entanglement and associated research agenda, and then follow with implications for research and practice.

Measurement of entanglement and future research agenda

Scenarios of no entanglement and of low degrees of entanglement lend themselves well to examination. Using a psychometrically adequate measure of both character and competence will be extremely important, and there are already robust measurements of character (e.g. the VIA Inventory of Strengths, based on Peterson's and Seligman's work, and the LCIA-Leader Character Insight Assessment, based on Crossan et al., in press) and competence (e.g., Lawrence et al., 2009; Quinn et al., 2015) that are available. We have proposed that, in the case of a low degree of entanglement, character acts as a moderator and hence current studies of leadership competence could be enhanced by including a measure of character to examine the effects on performance. We have also proposed that the duration of the enhancing effect of character on the competence-performance link will be

temporal. As such, low entanglement studies lend themselves to research approaches that prime character. It is likely that simply activating an awareness of character may have important performance implications in the short term. For instance, Pillutla and Chen (1999) found that when undergraduates participated in a social dilemma that was relational rather than economic, they operated based on an implicit norm of cooperation, a character element of the virtue of collaboration, and were more willing to contribute to a collective fund.

We have also suggested that there are situations where leaders suppress their character, which builds upon the context question of where entanglement is likely to occur, and this can be empirically examined. Importantly, future research could investigate the conditions that tend to disentangle or deactivate character, and temporal aspects such as the frequency, duration, stability, and time lag of entanglement and its performance effects. We see this line of research as an important extension of prior research, such as that of the famous Milgram and Zimbardo experiments, which can move us beyond manipulating context and understanding personality traits, to examine whether strength of character may provide important insights. As well, character is something that can be learned and therefore offers an important consideration in leadership development. Making sure that time variables are included in any design will be consistent with the view of entanglement as a dynamic process that occurs over time.

At the same time, character can be latent, and not be activated, in leaders. Whereas primes can be used to activate character, they can also be used to inhibit it. For example, Molinsky, Grant, and Margolis (2012) found that unobtrusively priming an economic schema (i.e., a knowledge structure that prioritizes rationality, efficiency, and self-interest—concepts at the heart of economics) was enough to decrease compassion, a character element of the virtue of humanity that has been shown to result in favorable organizational outcomes, when delivering bad news to someone. The authors found that the individuals primed with this economic schema failed to experience emotion (e.g., compassion) or believed it was unprofessional to express the emotion (e.g., empathy) they felt. It would be worthwhile for future research to further understand the mediating mechanisms through which de-activating character primes operate. This type of information can help explain why entanglement can decrease over time.

An important avenue of research is empirical work on high degrees of entanglement. A good place for future research to start is to examine why character and competence become deeply interconnected with one another, thus enabling the entanglement helix to develop over time. Whereas research can also determine whether character and competence are both highly developed and that extraordinary performance is being consistency achieved, understanding the reinforcing quality of the entanglement process is vital to addressing whether high entanglement exists or not. In the earlier section that describes "when" entanglement is achieved, we revealed that entanglement is characterized by a spiraling pattern; that is, changes in character (or competence) not only lead to the development of character (or competence), but that these changes in character (or competence) also lead to changes in competence (or character) over time. In other words, future research will need to address why early levels of character and competence may provide a foundation for the eventual development of the entanglement between them. Mitchell and James (2001) describe this type of a relationship as a pattern of "cyclical recursive causation," also known as a spiral.

According to Ferrin, Bligh, and Kohles (2008, p. 165), the "idea of a spiral suggests that the most important determinants of the focal variable are the immediate precursors of that variable." The effect of one variable then, seems to "leap" onto the other variable in a spiral model, which demonstrates the need to identify the causal motor(s) that drive the spiral. In particular, Ferrin et al. (2008) illustrated that these casual motors can consist of the variables present in the relationship. For example, in their study on perceived trustworthiness and cooperation spirals, they found that cooperation is reciprocated only because of its effect on perceived trustworthiness, and perceived trustworthiness is reciprocated only because of its effect on cooperation. In applying this concept to entanglement, it suggests that the effect of prior character on present competence, and the effect of present competence on future character, become the casual motors that drive entanglement. In examining the deep interconnection between character and competence present in high entanglement, we are reminded by Selig and Preacher's (2009) article on developmental research to be mindful of the importance of choosing the period (time of interest in the life of the participants), the span of the study, and the [time] lag in the study. As Mathieu, Kukenberger, D'Innocenzo, and Reilly (2015) point out, the different correlations between team cohesion and performance observed in studies in their meta-analysis, may, in part, be from the differences in the timing of the cohesion–performance measurements and lifecycles of teams sampled in the studies. As such, we encourage future research to further theorize about how the relationship between character and competence can emerge over time.

Trait activation theory (e.g., Tett & Guterman, 2000) can help with this endeavor. Character includes some personality traits that are inherently virtuous, such as conscientiousness, determination, and self-control (Crossan et al., in press). As propensities, traits are latent constructs. The behavioral expression of a trait—the process of trait activation—requires arousal of that trait by trait-relevant situational cues. Tett and Burnett (2003) list five work situations that can be relevant to expression of traits at work: job demands (tasks and duties), distractors (interfere with performance), constraints (restrict cues for expression), releasers (counteract constraints), and facilitators (makes trait relevant information more salient). This list is a good starting point for research on the context associated with entanglement processes.

Furthermore, in addressing how the entanglement helix emerges over time, future research can also consider rate of change (i.e., how fast the amount of one variable increases or decreases per unit of time) in their efforts. According to Monge (1990), rate of change represents one dimension of dynamic behavior—along with continuity, magnitude, trend, periodicity, and, if the variable is discontinuous, duration—that should be considered when theorizing about a dynamic variable. Brain imaging techniques can be utilized to address this question of rate of change, as well as when character and competence are being activated. For example, an electroencephalogram (EEG), which examines electrical activity of the brain, can be used to help determine when character and competence are being activated during a particular task in the lab. We expect the timing between the two to be very close when high entanglement exists and further apart when low entanglement exists. In addition, brain imaging techniques,

including functional near infrared spectroscopy (FNIRS), which is a technique that involves shining a light to measure blood oxygenation in the brain, may also be used in addressing whether or not high entanglement exists. This technique may be able to provide some insight into an individuals' thoughts on their identity and if they consider character to be an integral part of it. The results from studies using techniques such as FNIRS will empirically help build upon the "who" theorizing question of entanglement. Also, in considering how much character is part of one's identity, we are reminded by Ferrin et al.'s (2008) research on spirals that suggests that the tendency to reciprocate is a conscious decision process. Therefore, leaders must consciously choose to activate on character and competence, which means that variables such as commitment, motivation, and aspiration become important variables in the entangling process that can also be measured.

In his call for more attention to time-related considerations in leadership research, Shamir (2011) stated: "… in order to understand leadership processes over time and the effects of time on leadership phenomena, and eventually develop temporal theories of leadership including propositions about time related mechanisms that govern the development of leadership relationships and their effects on outcomes of interest, we have to adopt a more inductive approach" (p. 312). Similarly, whereas we have suggested that entanglement may eventually be amendable to experimental techniques, we recommend that future research starts with in-depth qualitative case studies and interviews with the goal of observing, following, and describing entanglement as it evolves over time and developing grounded theory. Interviews would offer multiple "snapshots" of the binding between character and competence in practice. For example, leaders can be asked in-depth questions about the times in which they activated both character and competence in a particular situation and times when they felt they became disentangled.

In addition, instead of using a survey instrument to measure character, character may also be coded for in qualitative interviews that take place after a character intervention in an organization has occurred. Because entanglement is inherently a spiral model, we gain insights from Ferrin et al. (2008) and recommend that data must be collected at multiple times; using a longitudinal approach to measuring entanglement is also important in terms of assessing its development. When specific character dimensions and competencies bind with one another, we argue they will positively reinforce one another over time. Consequently, we expect independent measures of character and competence to increase over time as entanglement (and the connections between them) develops. A separate entanglement scale could be developed at some point but we need more theoretical and qualitative insights on entanglement before this type of measure can be developed.

Another important question to address is: What happens when competence and character are at odds? Whereas character and competence can certainly enhance one another, elevating one can happen at the expense of the other. An example of character eroding competence is that of executives who through incredible introspection destabilize themselves to the point of dysfunction as they uncover impediments to their development of character. Likewise, competence erodes character when individuals' lack of vulnerability and capacity to learn are used as protective mechanisms to avoid dealing with the underlying character related issues.

Although we highlighted specific examples of character dimensions in our examples, leader character as ideally more holistic. We see value in future research that examines the interrelations among the elements and dimensions of character. Crossan et al., (2013b) have described leader character development in business education which could be extended to understand leader character development in an organizational context. In addition, we alluded to the positive nature of character and we described leaders who are on a development path toward intentionally deepening [virtuous] character. However, character can be negative or deficient (not just underdeveloped). Our sense is that negative character would arise from serious imbalances in the dimensions of character such as high levels of drive and low levels of integrity and humility. Further research can examine this more thoroughly and the vocabulary around character can be enriched in the process. In general, we discussed "depth" of character; however, there are a variety of ways in which we could describe character: weak/strong, shallow/deep, or imbalanced/balanced; this last one would relate to how virtues can become vices.

Implications for theory

First, our research seeks to introduce the concept of character-competence entanglement and link it to extraordinary performance over time. In doing so, we elevate character alongside the well-accepted competency/capability view of leadership, and counter the negative connotations that often associate character with a "nice guys finish last" sentiment in managers' minds. Our theorizing has highlighted that a focus on competence without consideration of character is an incomplete pursuit in understanding leadership (Hannah & Avolio, 2011b). Character underscores the importance of critical reflection, and bolsters learning beyond proficiency or singular expertise by allowing for the integration of knowledge, perspectives, and ideas beyond what is available within a given point of view. By extending examples from the natural sciences into the management discipline, we describe how character and competence can bind together in practice to positively impact performance over time.

Second, we also identify naturally-occurring learning opportunities underlying the development of character and competence, and their binding together. The informal learning opportunities identified—learning from meaningful life experiences, interpersonal relationships, and communities of practice—are grounded in learning theory and the practice-based view of the firm, and represent repositories of learning external to leaders that can be activated to eliminate competence or character gaps. As the binding between character and competence develops over time, the learning opened up by activating one's transcendence and courage can be deeper and more transformational than those opportunities motivated by a learning orientation alone, because these character dimensions imply a level of vulnerability, emotional risk, and exposure, not necessarily embraced by someone high on learning orientation but lacking depth of character.

Third, in introducing the concept of character-competence entanglement, we incorporated temporal dynamics into our theorizing, propositions, and recommendations for future empirical work on entanglement. In doing so, we considered the call for research that highlights the dynamic nature of leadership, and that seriously takes time into account in theory development and in leadership theories in particular (e.g., Mitchell & James, 2001; Pitariu & Ployhart, 2010; Shamir, 2011). Our propositions take a first step by specifying the effects of low and high entanglement on performance in a temporal manner. Future inductive research on entanglement will help to further conceptualize the dynamic nature of this construct, including the time, duration, and shape of the relationships over time.

Implications for practice

We highlight to practicing managers the informal, and often overlooked, ways in which leaders can acquire knowledge in situ (Lave & Wenger, 1991) as well as close character and competence gaps. The informal learning opportunities we presented are rooted in the notion of "learning by living" and build on the idea that leadership is constructed in both economic life (i.e., the workplace) and in social life (i.e., non-work arenas, such as in a marriage) (Sjöstrand et al., 2001), thus indicating that character and competence can be consciously cultivated in daily life. In this sense, life experiences, interpersonal relationships, and communities of practice, provide opportunities to develop and bind the habits of character and competence in practice.

There are also managerial implications in relation to the business scandals of the last decade, which have been followed by increasing references to the role of character in firms (Crossan et al., 2013b; Hannah & Avolio, 2011b; Hollenbeck, 2009; Sosik & Cameron, 2010; Sosik et al., 2012; Wright & Goodstein, 2007; Wright & Huang, 2008). As a society, we struggle to understand the contribution of character when we prioritize celebrating leaders who get [short-term] results and demonstrate competence in their jobs. Our model informs an assessment of the performance outcomes of today's leaders by suggesting that, although leaders lacking depth of character may build on their current competencies to achieve [short-term] results, extraordinary performance is rooted in highly-developed character and competence that are entangled.

Finally, another practical misconception about character is that a leader either has it or does not, which leads companies to focus their human resource efforts on selecting and recruiting individuals who happen to have character and to prioritize developing the competencies necessary for the specific job. In contrast, our theorizing highlights the possibilities behind proactive development—inside and outside the work setting—of character and competence, and their interconnectivity. Thus, the current research relieves some of the pressure that is normally placed on leaders to "do it all" because it proposes that any leader can build their character and utilize naturally-occurring learning opportunities in order to be successful.

Conclusion

We offer a theory on character-competence entanglement that addresses why character-competence entanglement matters, and how it is achieved. We invite micro and macro leadership scholars to embrace the opportunities opened by elevating character alongside the well-accepted competency/capability view of leadership. We seek to motivate a change in our scholarly dialogue in leadership, which reveals both a recasting of the meaning of competence and a new focus on the role character plays in learning to lead, and in facilitating extraordinary results.

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