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Admiration: A conceptual review

Diana Onu^a, Thomas Kessler^b, & Joanne R. Smith^a

^a University of Exeter, ^b Friedrich Schiller University

Abstract: 120 words

Text: 7,994 words

Total (including abstract, text, and references): 10,372 words

Corresponding author:

Diana Onu

University of Exeter, Business School

Streatham Court, Rennes Drive

Exeter EX4 4ST, UK

Abstract

Admiration is thought to have essential functions for social interaction: it inspires us to learn from excellent models, to become better people, and to praise others and create social bonds. In intergroup relations, admiration for other groups leads to greater intergroup contact, cooperation, and help. Given these implications, it is surprising that admiration has only been researched by a handful of authors. In this paper we review the literature, focusing on the definition of admiration, links to related emotions, measurement, antecedents, and associated behaviors. We propose a conceptual model of admiration that highlights admiration's function for approaching and emulating successful models, thus contributing to social learning at the interpersonal level and to cultural transmission at the group and societal level.

Keywords: admiration, role-models, social comparison, cultural transmission, social learning

Every year in the United States, the Gallup polling organization asks Americans what man and woman are most worthy of their admiration. For the last six years, the most admired man has been President Barack Obama; for the last twelve years, the most admired woman has been former Secretary of State Hillary Clinton (Jones, 2013).

Although the list is highly popular and stirs significant debate, one is left to wonder what these rankings actually mean. What do they tell us about the qualities of those who are admired or about the characteristics of those who admire? Do the results of such lists serve as a barometer for where society is heading and predict future collective behavior? Although we might intuit answers to these questions, evidence to support our intuitions is scarce – little empirical work has been conducted on admiration (Algoe & Haidt, 2009).

Admiration is seen to be a uniquely human emotion (Haidt & Seder, 2009). As a social emotion, admiration has been theoretically linked to how people relate to role models (Smith, 2000) and, on a wider scale, how it facilitates social learning within groups (Fessler & Haley, 2003). It is also believed to play a part in positive behaviors between social groups (Cuddy, Fiske, & Glick, 2007; Onu, Smith, & Kessler, 2014). Given its links to multiple topics such as social comparison, cultural evolution, and intergroup behavior, admiration is surprisingly little theorized or studied empirically. It has been the focus of no more than a handful of authors, and a substantial amount of ground remains uncovered. There are also interesting debates to settle: how is admiration different from awe or envy; does admiration motivate modeling or does it induce passive contemplation; and how might admiration facilitate social learning?

Admiration is an emotion with consequences at the individual, interpersonal, and intergroup level. Admiration can help us understand why people choose certain role-models and with what consequences, providing insights into children's social

development (Algoe & Haidt, 2009). Understanding admiration can provide insight into why some students appreciate their higher-achieving peers, being inspired to improve, while others look upon them with passive resentment (Immordino-Yang & Sylvan, 2010). Knowing why people particularly admire certain leaders can help inform our understanding of political influence and acceptance of social hierarchy (Sweetman, Spears, Livingstone, & Manstead, 2013). Not least, studying admiration at a group level can reveal how people manage to overcome the biases that favor their own group and begin to appreciate other groups, learning from them and seeking cooperative relations (Onu, Smith, et al., 2014).

In this paper, we present past results on admiration, while highlighting existing debates and suggesting directions for future research. We explore the current state of knowledge on admiration in five sections. The first four sections focus on definition, measurement, elicitors, and action tendencies. For each of these aspects of admiration, we present the ‘knowns’ and ‘unknowns’ and discuss specific directions for future research. In the final section, we present a conceptual model of admiration – we construe admiration as an emotion whose essential function is to support learning from and emulating models of excellent skill or talent. As such, admiration has important functions for social learning at the individual level and for cultural transmission at the societal level.

Definitional Issues

Admiration is an other-focused emotion (Ortony, Clore, & Collins, 1990; Smith, 2000) elicited by virtue or skill above standards (Immordino-Yang, McColl, Damasio, & Damasio, 2009). Admiration is at the same time an acknowledgment of the superiority of another person, as well as a sense of wonder at their excellence (McDougall, 1909); it can be described as ‘surprise associated with pleasure’ (Darwin, 1872, cited in Algoe & Haidt, 2009). Although admiration for skill or virtue is seen to be uniquely human (Haidt &

Seder, 2009), other animals living in social hierarchies can display affiliation directed at dominant individuals, which is seen to be related to admiration (Fessler & Gervais, 2010).

These definitions are consistent with the way admiration is employed in common parlance as “regard for someone or something considered praiseworthy or excellent” (‘Oxford English Dictionary’, n.d.) (for an extended discussion of the meaning and etymology of admiration, see Schindler, Zink, Windrich, & Menninghaus, 2013).

However, Algoe and Haidt (2009) restrict the definition of admiration to the *non-moral domain*, as being elicited by those individuals of skill or talent exceeding standards. By contrast, the emotion elicited by virtue exceeding standards is termed ‘elevation’ (Haidt, 2000). In this paper, we adopt Algoe and Haidt’s narrow definition of admiration as an emotion elicited by individuals of competence exceeding standards. The reason for narrowing the definition of admiration from its broader sense in common parlance is that admiration for skill and admiration for virtue (i.e., admiration and elevation) have been shown to produce different consequences at physiological (Immordino-Yang et al., 2009), and psychological and social (Algoe & Haidt, 2009) levels, which favors treating them as distinct emotions (we discuss these differences below). While research interest in elevation has increased in research years (e.g., Landis et al., 2009; Schnall, Roper, & Fessler, 2010; Silvers & Haidt, 2008), thus addressing emotions elicited by highly virtuous people, the current review aims to focus on the less investigated emotion elicited by highly competent people – admiration.

Like many social emotions, admiration can manifest at various social levels (individual, dyad, group; Keltner & Haidt, 1999). Interpersonal admiration has been studied by emotion researchers (Algoe & Haidt, 2009; Immordino-Yang et al., 2009; Smith, 2000) and in the social comparison literature (Van De Ven, Zeelenberg, & Pieters, 2011). Admiration as a group-based emotion (i.e., the emotion felt by an individual towards outgroup members when they categorize themselves as an ingroup member,

Mackie, Devos, & Smith, 2000) has been investigated in the intergroup relations literature, particularly in relation to stereotype content (Cuddy et al., 2007; Fiske, Cuddy, Glick, & Xu, 2002) and group-based status hierarchies (Onu, Smith, et al., 2014; Sweetman et al., 2013). The current review aims to integrate insights from these separate lines of research and present a unitary definition of admiration.

An important step in determining admiration's specificity is to distinguish it from related emotions. There is variation among authors regarding to which family of emotions admiration belongs. Ortony and colleagues (1990) categorized admiration as an appreciation emotion, together with appreciation, awe, esteem, and respect. Smith (2000) included it in the category of upward assimilative emotions, together with optimism and inspiration. Algoe and Haidt (2009) included admiration in the category of other-praising emotions, together with gratitude and elevation. Past studies have looked at the differences between admiration and elevation and gratitude (Algoe & Haidt, 2009; Immordino-Yang et al., 2009), awe (Keltner & Haidt, 2003), adoration (Schindler et al., 2013), and envy (Smith, 2000; Van De Ven et al., 2011) – Table 1 summarizes these results.

Knowns and Unknowns

Admiration involves feeling positive about the achievement of an excellent other. But so do elevation, gratitude, and awe, and to understand more about admiration we need to know how it differs from related emotions. Although some work has distinguished admiration and gratitude (Algoe & Haidt, 2009) and admiration and elevation (Algoe & Haidt, 2009; Immordino-Yang et al., 2009), no empirical work distinguishes between admiration and awe. We discuss some possible avenues for future research below.

The distinction between admiration and envy is also intriguing. As individuals, we know that admiration feels pleasant and envy unpleasant, but why do such feelings arise?

Does envy feel unpleasant so it can motivate improvement in order to avoid negative consequences associated with comparing to a better other (Van de Ven et al., 2011, Study 4), or, on the contrary, is admiration pleasant in order to attract people to role models they can learn from (Henrich & Gil-White, 2001)? With limited empirical evidence on either side of this question, further experimental contributions are needed to answer these questions. In the section on admiration's elicitors, we discuss some future research avenues regarding the distinct elicitors of admiration and envy, as well as their motivational role.

Future Directions

We mentioned that no empirical evidence distinguishes between admiration and awe; however, theoretical premises can be used to construct testable hypotheses. Keltner and Haidt (2003) proposed that admiration is felt toward excellent others and motivates self-improvement, while awe is felt towards those who are of such exceptional ability that all we can do in response is to passively wonder and assert our submission. This distinction and its consequences are easily testable by experimentally varying the degree of excellence in a comparison target. For instance, imagine a student interested in computer science. Would he feel admiration or awe for a fellow student who is the best in computer science in their class? How about a fellow student who manages to program a very complex game in her spare time and goes on to win a national computer science competition and a substantial cash prize? Theory would predict that admiration is the more likely response in the former situation, while awe more likely in the latter.

The proposed distinctiveness of behaviors associated with admiration and awe can also be tested based on Keltner and Haidt's (2003) study. When the fellow student is top of the class, the perceiver (who feels admiration) should feel inspired to learn from her and feel motivated to achieve better grades. However, when comparing himself with a national competition winner, he should feel higher levels of awe and not be motivated

to achieve a similar performance. In turn, he should exhibit submission, for example, by being more likely to accept to work as the other student's apprentice in her next project. Such manipulation of an excellent target's performance level in an experimental setting provides the opportunity of testing the relationship between admiration and awe and the consequences of each.

The example above relates to the important, yet unresolved, aspect of admiration's definition: its level of arousal and approach function (Russell, 1980). Several works on admiration construed it as an emotion that facilitates the approach of successful others and motivates the admirer to learn from these models (Algoe & Haidt, 2009; Haidt & Seder, 2009; Henrich & Gil-White, 2001; Smith, 2000), which suggests that admiration is an approach emotion that is highly energizing (see also Immordino-Yang & Sylvan, 2010). However, some writers describe admiration as a passive emotion and relate it to passive relationship consequences (Cuddy et al., 2007; Van de Ven et al., 2011). We discuss these differing points of view in the following sections.

Measurement

This section discusses the methods used in studying admiration. We begin by describing how admiration has been elicited in experimental studies, continue by analyzing how it has been measured, and end by proposing additional measures that could be employed in future research.

Eliciting Admiration

Research has generally elicited admiration by either asking people to think of someone they admire or by presenting them with novel admirable models. To employ reminiscence of past experiences, Algoe and Haidt (2009) asked participants to think of a time when they witnessed an admirable person¹ (see also Schindler, Paech, &

¹ In study 1, Algoe and Haidt (2009) used the prompt "Please think of a specific time when you witnessed someone overcoming adversity. Please pick a situation in which someone else successfully overcame an

Löwenbrück, 2015); similarly, Van de Ven (2010, Study 2) simply asked participants to remember a situation in which they felt admiration.

Consistent with the view that the essential cognitive appraisal preceding admiration is the skill or virtue of another, researchers have also used novel role models to elicit admiration. Algoe and Haidt (2009, Study 2a) elicited admiration using a video taken from a documentary about basketball star Michael Jordan “and depicted scenes of him ‘flying’ through the air to dunk the basketball into the net” (p. 113). In a follow-up study (2b), the authors asked participants to keep a diary of events of the type they saw in the video of the previous study, therefore creating the opportunity for admiration to be elicited by a wide range of events participants encountered in their daily lives (for other studies using novel models to elicit admiration, see Immordino-Yang et al., 2009; Van De Ven et al., 2011).

Measuring Admiration

Self-report – Emotion lists. Research from the stereotype content model has assessed group-based admiration using lists of emotion items: *admiring, fond, inspired, proud, respectful* (Fiske et al., 2002) or *admiring* and *proud* (Cuddy et al., 2007). Algoe and Haidt (2009) also used a list of emotion words and, using factor analysis, identified an ‘admiration’ factor composed of: *admiration, respect, moved, inspired, and awe*.

Self-report – Appraisals-based scales. Onu, Kessler, and colleagues (2014; Study 1) measured group-based admiration by assessing the appraisals associated with admiration by adapting a scale previously used to measure awe (Shiota, Keltner, & John, 2006). In a follow-up study, the scale was reduced to three items and adapted to measure

obstacle or handicap”, but they discovered that this prompt elicited stories involving admiration mixed in with several other emotions. They therefore abandoned that prompt and adopted the more focused prompt in Study 3, asking participants to write a letter to someone they know “about a time when that person displayed great skill or talent, for which they felt admiration” (J. Haidt, personal communication, 2014).

admiration in a specific domain (Onu, Smith, et al., 2014; Study 1) (for an alternative scale measuring admiration, see also Schindler et al., 2015).

Autonomic nervous system (ANS) response. Only one study, to our knowledge, has included physiological measures of admiration (Immordino-Yang et al., 2009). The authors measured heart rate and respiration rate as independent measures of emotional arousal. Their results indicated an energizing function of elevation, but not of admiration.

Brain state. Immordino-Yang and colleagues (2009), as reported above, investigated admiration and elevation as distinct emotions, revealing communalities as well as differences in the localization of these emotions. All of the social emotions investigated (admiration, elevation, compassion) engaged some of the same brain regions employed by primary emotions (anterior insula, anterior cingulate cortex), while also engaging the posteromedial cortices, an area linked to making inferences about another person's state of mind or beliefs.

Knowns and unknowns

Most studies on admiration have employed self-report measures, and only one study employed some ANS response and brain state measures. A much wider range of methods could potentially be used, which could provide important theoretical insights into the nature of admiration. Please see Table 2 for a summary of the methods employed in the study of admiration, along with the dimensions of admiration that could be tested employing these methods (Mauss & Robinson, 2009). Below, we outline some limitations and caveats of current methods, as well as suggestions for the employment of additional methodologies.

Future Directions

To measure admiration, most studies have used self-report measures, such as scales or single-item measures. Self-report measures increase in accuracy when they relate

to currently experienced emotions rather than emotions one has felt in the past (Mauss & Robinson, 2009). Based on this evidence, studies eliciting admiration for a novel target using a narrative might yield more valid results than those asking participants to remember a time when they felt admiration. Narratives, on the other hand, may impose situations on participants that may not reflect their individual experience of the emotion. One solution to measure individually-experienced current emotion is to ask participants to keep a diary of specific emotional events (see Algoe & Haidt, 2009; Study 2b). Self-report measures are also affected by participants' motivation to respond in a socially desirable way. Most research has focused on participants playing down their ratings of negative emotions (Mauss & Robinson, 2009); however, the same effect may lead participants to report higher admiration, especially when positive and negative emotions are addressed in the same study. As well, in certain circumstances, feeling admiration could be socially undesirable. Evidence suggests, for instance, that lower status social groups might feel favorably towards higher status groups, although they will not report this in self-report measures (Jost, Banaji, & Nosek, 2004). These limitations need to be considered when using self-report measures.

Self-report measures seem the obvious first step in researching a relatively unstudied emotion such as admiration, but other methods could be employed as complements. For instance, ANS response measures (e.g., electrodermal and cardiovascular responses) would be very useful in determining the level of arousal associated with admiration. ANS response has only been measured in one study, as a secondary measure with a very small sample (Immordino-Yang et al., 2009). Given the debates surrounding the passive or active nature of admiration described earlier, the measurement of this ANS response could advance theory on admiration by indicating its level of arousal compared to other emotions. Another debated issue is admiration's place on the approach-avoidance continuum (Russell, 2003). Electroencephalographical (EEG)

assessment of frontal activation in the brain is related to approach motivation (left hemisphere) and avoidance motivation (right hemisphere) in emotional assessment (Mauss & Robinson, 2009). EEG has not been employed in the measurement of admiration, and this method could shed light on the approach-avoidance nature of this emotion.

Behavioral measures have not been employed in the measurement of admiration. These measures might include the identification of vocal characteristics (amplitude, pitch), unique facial expression, whole-body behavior, and so on (Mauss & Robinson, 2009). Based on the assumption that discrete emotions have such strong individuality in facial expression and behavior that they are recognizable by an observer (Ekman, 1992), future research should describe the unique observable features accompanying admiration. Based on such a list of features, research could employ observer ratings alongside other measures of admiration, by-passing some of the issues surrounding self-report discussed above. Furthermore, vocal characteristics such as pitch are related to the degree of emotional activation (Bänziger & Scherer, 2005), so the study of pitch in admiration could help clarify whether admiration is indeed an energizing emotion.

Elicitors of Admiration

In this review, we work within a largely consensual (Mauss & Robinson, 2009) model of emotions according to which specific emotions arise from distinct cognitive appraisals of the social context (named here as ‘elicitors’ and treated in the current section; Roseman, 1996) and are followed by tendencies to perform specific behavior (named in this paper as ‘actions’; Frijda, 1986). This model of emotion also extends to group-based emotions – emotions are not only elicited by stimuli relevant to individuals, but also to our social identities and group memberships (Mackie et al., 2000). Both the elicitors and actions give emotions their specificity but are also instrumental in

understanding the functionality of emotions. We begin by describing the elicitors of admiration.

Competence

We defined admiration as the emotion elicited by those of competence exceeding standards (in line with Algoe & Haidt, 2009). This definition is also consistent with research conducted in an intergroup setting, where Fiske et al. (2002) found that admiration characterizes how group members feel toward out-groups that are seen to be competent, regardless of whether they are perceived as warm or not (Study 4). In the social comparison literature, admiration is seen to be the positive emotion elicited during upward comparison (Smith, 2000; Van De Ven et al., 2011), leading to the view that admiration is elicited when the admirer is less competent than the admired. While it may often be the case that admiration is elicited when the perceiver is less competent than the target of admiration, admiration can also occur when people are equally competent, but both of a level of skill or performance exceeding standards. For instance, an accomplished athlete can admire another equally-accomplished athlete, recognizing her excellence.

Some studies have focused on competence in the context of hierarchies (i.e. status or prestige), as well as competence as understood within particular social groups (i.e. prototypicality). We review these results below.

Status. When people are perceived as highly competent, they are also often seen to be of higher status or prestige within a group, although this is not always the case (Fiske, 1991). Therefore, while admiration is elicited by others' high competence, it may sometimes, but not always, also be elicited by perceptions of others' social status. Henrich and Gil-White (2001) proposed the existence of two types of hierarchies in social groups: dominance-hierarchies and prestige-hierarchies. While dominance hierarchies are imposed by threat and aggression, in prestige hierarchies one's place on

the social ladder is earned by possessing certain socially-valued attributes (such as excellent skills or abilities). Admiration only occurs in prestige hierarchies, and not in dominance hierarchies (Fessler & Haley, 2003). These results are supported by sociometric research in school groups, showing that children of high-status and low-dominance elicit more admiration than their higher-status and highly-dominant counterparts (Lease, Musgrove, & Axelrod, 2002).

Legitimacy. Another way to express the concept of ‘earned prestige’ – captured by Henrich and Gil-White’s (2001) prestige hierarchies described above – is to refer to the legitimacy of status – how deserved do people believe another’s social position to be. Onu, Smith, and colleagues (2014) showed that group-based admiration is elicited by groups of higher status only when their high position in the status hierarchy is perceived to be highly legitimate (for similar results, see also Sweetman et al., 2013; Van De Ven et al., 2011).

Prototypicality. Competence and status, however, depend greatly on the social context. If admiration is elicited by people of competence exceeding standards, it is important to define *whose* standards constitute the benchmark. For instance, a person admired for their physical fitness in a body-building competition will probably not elicit the same response in a ballet hall – the definition of what is admirable fitness shifts with the norms and characteristics of the social group. Admiration within a social group will be elicited by the group-defined competence: a group member’s prototypicality (Oakes, Haslam, & Turner, 1998). The prototypicality of other ingroup members is likely to become important (and therefore be admired) when one is invested in (identifies with) that particular group (Turner, Hogg, Oakes, Reicher, & Wetherell, 1987). Onu, Kessler, and colleagues (2014) looked at the dynamics of prototypicality and identification in relation to group-based admiration. They surveyed participants in various European countries, asking them how they rated other countries in terms of competence and

prototypicality for Europe (i.e. how representative they are of European culture). When participants identified strongly with Europe, their feelings of admiration for European countries other than their own were more related to their prototypicality (i.e., how typical for Europe they were perceived to be) and less related to how competent in general they perceived that country to be.

Appraisals of very high competence in others, however, could also elicit other emotions, such as envy (Smith & Kim, 2007) or awe (Keltner & Haidt, 2003). Several authors proposed that an additional appraisal that leads to the elicitation of admiration is that of the attainability of a higher level of competence by the admirer.

Attainability

In the context of upward comparison, Smith (2000) proposed that admiration occurs only when people believe they have the potential to become like the admired. Algoe and Haidt (2009) consider admiration's motivational output to be inspiration (Thrash & Elliot, 2004) to pursue one's goals, which in turn is more likely to occur when the target's position is attainable (Lockwood & Kunda, 1997; Schindler et al., 2013). This is also consistent with the view that admiration evolved to facilitate learning from role models (Haidt & Seder, 2009; Henrich and Gil-White, 2001) – if admiration is functional for improvement, then it should become active only when improvement is possible. In the same vein, Onu, Smith, and colleagues (2014) found similar effects for group-based admiration. By manipulating how likely improvement was for the group, they found that participants reported higher levels of admiration for an outgroup only when they believed their own group was likely to improve in the future. However, Van de Ven and colleagues (2010, Study 4) report the opposite effect, finding higher levels of admiration when change is unattainable.

Knowns and Unknowns

High competence has been the focus of most research concerning the antecedents of admiration. Whether authors define it as general competence (Cuddy et al., 2007; Fiske et al., 2002) or related concepts, such as skill or talent (Algoe & Haidt, 2009), legitimate status (Onu, Smith, et al., 2014; Sweetman et al., 2013), or prototypicality (Onu, Kessler, et al., 2014), they seem to generally agree that possessing a degree of excellence is a prerequisite for being admired. Nonetheless, research conducted on this category of elicitors offers opportunities to extend the results to different levels of analysis and test results at the intergroup and interpersonal level respectively. We discuss some possible avenues below. For a general overview of research on admiration's elicitors, please refer to Table 3.

Future Directions

Little empirical work overall has focused on the elicitors of admiration. One of the interesting avenues for future research is the relation of admiration to prototypicality for a particular group. If admiration is elicited by people of competence exceeding standards, then it is important to explore *whose* standards are considered. Considering prototypicality (defined in terms of the group's ideal; van Knippenberg, 2011) as an antecedent of admiration would help clarify the way in which group-defined standards determine when admiration is elicited. For instance, research could test whether members of a group who are seen as more prototypical do indeed elicit more admiration from other group members. An interesting expansion of this research could be to experimentally manipulate the extent to which a person identifies with one group or another (e.g., by asking them to spend time thinking about what they have in common or how they are different from other group members). We would expect admiration for highly prototypical individuals to be stronger for perceivers who identify highly with the group. Given that social group members often choose leaders who best embody the

identity of their group (Haslam, Reicher, & Platow, 2012), admiration might describe the emotional response of followers towards prototypical leaders.

Another issue related to the excellence of the admiration target concerns the domain of excellence. Smith (2000) argued that admiration occurs in those domains that are relevant and important to the self and one's goals. Van de Ven et al. (2011), on the other hand, proposed the opposite – admiration will occur for high performing others in domains that are not directly relevant (and thus not threatening) to the admirer. None of these studies, though, assessed how important the domain was for the person, and exploring the moderating role of goal relevance of the domain would be a good avenue for further research.

The most striking contradiction in empirical data so far relates to the conditions under which others' competence becomes an elicitor for admiration. Here, more empirical work is needed to elucidate the role of attainability in the elicitation of admiration. As shown earlier, while some results suggest that attainable performance leads to admiration (Onu, Smith, et al., 2014), others suggest that, on the contrary, unattainable conditions lead to admiration (Van de Ven et al., 2011). Both assumptions stem from a functionalist view of admiration. Those who believe that admiration is energizing for self-improvement (following the theoretical conception of Henrich & Gil-White, 2001) will assume that it is only natural for admiration to be activated only when improvement is possible. However, Van de Ven and colleagues' (2011) argument is based on data demonstrating that admiration (as opposed to benign envy) is a pleasant but passive state, so it only makes sense for its activation to occur with unattainable higher performance.

One possible explanation for Van de Ven and colleagues' (2011) contrasting result may be their experimental situation. Across four studies, the target of admiration was a capable fellow student. In Study 4, they introduced attainability as control over

one's fate (by priming that intelligence is either malleable or fixed). They found that participants in the attainable conditions (who believe intelligence is malleable) felt greater envy for a superior student and marginally lower levels of admiration; this result was interpreted to show that there is a negative relationship between appraisals of attainability and admiration. However, the experimental situation may have signaled a particular type of attainability: past feasibility, the perception that 'it could have been me', as opposed to future feasibility (i.e., expectations that we will achieve our goal in the future, 'it could be me') (Cook, Crosby, & Hennigan, 1977). Although both past and future feasibility reflect expectations of goal attainability, they produce very different effects following comparison with a better other – high past feasibility is associated with higher resentment and higher defensive reactions following upward social comparison, while high future feasibility is associated with lower resentment (Bernstein & Crosby, 1980). Therefore, the manner in which attainability is defined and manipulated will probably produce different consequences for admiration. Future research can elucidate the role of attainability by disentangling the two forms of past and future attainability and their relation to admiration. We suggest that attainability as a future-focused perspective is the dimension essential for a motivating effect of admiration (see also Onu, Smith, et al., 2014).

Consequences

One of the most interesting aspects of admiration is what it does, the kind of behaviors it facilitates. Below, we discuss the consequences of admiration as they occur at the intraindividual level (consequences for the admirer), interpersonal level or intergroup level for group-based admiration (consequences for the relationship), and group and cultural level (consequences for the group) (Keltner & Haidt, 1999).

Consequences for the Admirer

Algoe and Haidt (2009) found that admiration will be experienced physically as an energizing sensation that motivates modeling and working harder towards one's success. To facilitate imitation, admirers are likely to display heightened attention to the skill displayed, display prolonged gazes at the target, and seek their proximity (Henrich & Gil-White, 2001). Similarly, Schindler and colleagues (2015) have found that admiration leads to self-expansion through the emulation of an outstanding model. In an intergroup context, Onu, Smith, and colleagues (2014) have also found that group-based admiration is associated with a desire for intergroup learning. However, in a series of studies assessing admiration's relation to actual performance on a task, Van de Ven and colleagues (2011) found that admiration does not stimulate higher performance.

Consequences for the Relationship

Algoe and Haidt (2009) also found specific relationship consequences following admiration; participants who felt admiration reported intentions to enhance the reputation of the admired target by praising them to others, and to acknowledge their performance. Several studies link group-based admiration with positive consequences for intergroup relations. Surveying the attitudes of U.S. participants towards a variety of ethnic, professional, or social groups, Cuddy et al. (2007) demonstrated a positive link between intergroup admiration to two categories of behavior towards outgroups: active facilitation (helping and protecting others) and passive facilitation (cooperating or associating with others). Onu, Smith, and colleagues (2014) also found evidence that group-based admiration is associated with willingness to receive help from an admired outgroup. In a study on national group members' reactions to more successful countries, they found that admiration for a high-performing outgroup is related only to a desire for autonomy-related help (e.g., receiving training or guidance to improve) from a higher-status outgroup but not dependency-oriented help (e.g., donations). Admiration also

characterizes how people feel towards those they see as allies and with whom they wish to cooperate (Brewer, Alexander, Mackie, & Smith, 2002).

Consequences for the Group

Henrich and Gil-White (2001) propose that admiration has a unique function for cultural transmission in human groups; admiration facilitates the approach of skillful group members and the learning of skills from them, thus facilitating the diffusion of excellent skills throughout the group. These admired individuals are also praised for their skill, increasing their prestige within the group. The authors suggest that subordinates' admiration towards superiors characterizes a particular type of social hierarchy that is based on earned prestige. Sweetman and colleagues (2013) tested the effect of admiration on social hierarchy and found that admiration for higher-status members promotes hierarchy maintenance.

Knowns and Unknowns

For the perceiver, admiration has been found to be associated with imitation intentions and an increased motivation to improve, for both individual (Algoe & Haidt, 2009; Schindler et al., 2015) and group-based admiration (Onu, Smith, et al., 2014), although some empirical findings cast doubt on admiration's energizing role on actual performance (Van De Ven et al., 2011). As a social emotion, admiration also affects how the perceiver relates to the admiration target. Admiration is associated with wishing to praise the admired targets (Algoe & Haidt, 2009), associate or cooperate with them (Cuddy et al., 2007), or receive their guidance (Onu, Smith, et al., 2014). Admiration is also involved in the maintenance of social hierarchy in groups (Sweetman et al., 2013; see also Michel, Wallace, & Rawlings, 2013), at least when these hierarchies are based on earned prestige (Henrich & Gil-White, 2001). Please see Table 4 for an overview of the action tendencies associated with admiration.

Future Directions

One of the disputed – and most interesting – aspects of admiration is its potential to motivate self-improvement. First, evidence to support the energizing potential of admiration is limited, and more physiological response measures could be employed to test whether admiration is actually energizing (as discussed in relation to measures of admiration). If admiration does motivate improvement, it is not clear whether it only motivates improvement in the specific domain of admiration and through copying the admired (as suggested by Henrich & Gil-White, 2001; Smith, 2000) or if it produces a general feeling of motivation towards becoming better in a variety of domains (as suggested by empirical evidence in Algoe & Haidt, 2009). These are valid questions for future research. Regarding self-improvement, of the few available empirical results, most studies employed scales measuring learning or self-improvement intentions. However, the inclusion of behavioral measures would represent a stronger test of the motivational effect of admiration. The effect of admiration on learning can easily be tested through recall tasks, and the effects on motivation through motivation-sensitive tasks (e.g., the Remote Associates Task used by Van de Ven et al., 2011, Study 2).

In terms of relationship consequences, researchers generally agree that admiration has a variety of positive (i.e., approach) consequences, such as contact, receiving help, cooperation, or praising the admired. However, it is difficult to say whether admiration facilitates positive intentions or actual positive behavior. Given that the studies cited above measured only intentions and have not included any behavioral measures, this is a good avenue for advancing research. One notable exception is Pettigrew (1998) who measured the actual number of out-group friends participants have. For example, in relation to group-based admiration, in addition to asking participants how they feel towards outgroups and to report their intentions for intergroup contact, participants could also be asked to sign up for inter-group contact activities, or to donate to charities organizing inter-group activities and exchanges. If admiration does indeed motivate

positive intergroup contact as discussed earlier, then it should not only be reflected in reported intentions, but also in intergroup behavior.

In the previous sections, we focused on past research on admiration, highlighting specific directions for future research in relation to the antecedents and consequences of admiration. Below, we integrate insights from past research and recent developments in emotion theory to propose a conceptual model of admiration.

Admiration – A Conceptual Model

In line with existing research on admiration (Algoe & Haidt, 2009; Fessler & Haley, 2003; Haidt & Seder, 2009; Henrich & Gil-White, 2001; Smith, 2000), we propose that admiration's essential function is to facilitate social learning in the competence domain. We restrict the definition of admiration to the competence domain, although admiration in common parlance can also be used to denote the emotion elicited by highly virtuous individuals (i.e., occurring in the moral domain). However, admiration as discussed in this review refers only to the competence domain in order to differentiate it from the positive emotion felt towards virtuous others, termed elevation (Haidt, 2000), as discussed earlier. Such 'competence exceeding standards' can take many forms (such as legitimate social status or prototypicality, as discussed above). As illustrated in Figure 1, we propose that admiration is elicited by people of competence exceeding standards, and is associated with reflection on the target's competence and a tendency towards imitation, which facilitates social learning.

By competence exceeding standards we refer to the admiration target's performance, ability, or skill, relative to social standards. Such standards are contextual and will depend on the frame of reference employed for comparison. For instance, someone may be admired for their sales pitch skill in their particular call centre, but not in the wider sales industry. What is meant by performance or ability will also be defined in context; for instance, an athlete can admire another athlete of much lower sporting

ranking, knowing that he has overcome considerable disadvantage and achieved against odds. As such, they would not admire his sporting performance, but his perseverance or capacity to maintain focus exceeding standards. To understand the situations when admiration occurs, one needs to pinpoint within the context of the relationship the relevant standards that apply and the relevant skill or trait that is admired.

Reflection on the Target's Competence

In a recent theoretical paper, Baumeister, Vohs, DeWall, and Zhang (2007) challenge the commonly held assumption that emotions directly cause behavior, and propose that an essential function of emotions is to provide feedback and encourage reflection on the emotion stimulus in order to facilitate learning. For instance, feeling ashamed informs the person about the transgression of social norms and encourages them to reflect on the nature of norms and learn how to avoid such transgression in the future. The conception of emotions as serving a learning function is particularly relevant for admiration and its role in facilitating social learning. Applied to admiration, this would suggest that admiration serves to focus attention on the admired skills and facilitates memorizing these skills for future use. After all, much of social learning is not applied immediately but stored in order to be employed in the future as appropriate (Bandura, 1977). The view that admiration focuses individuals on the particular skills or techniques to be learned is consistent with admiration's association with prolonged stares (Henrich & Gil-White, 2001) and contemplation of the target (Van De Ven et al., 2011). Onu, Smith, and colleagues (2014) have also found that higher admiration is associated with higher recall of information about the competent target, suggesting a role for admiration in facilitating memorizing of the admiration stimulus.

Social learning is contingent on a range of processes such as heightened attention, information processing, and memory (Bandura, 1977). Considering that "emotion's role is to focus attention on certain information and instigate further cognitive processing of

it” (Baumeister et al., 2007, p. 187), it seems pertinent that admiration would be involved in instigating the heightened attention and cognitive processes that facilitate social learning. The importance of reflecting on the admired target’s competence in order to learn their skill is consistent with theory of goal implementation that posits two distinct tasks for the individual pursuing a goal: a deliberative task, where the person decides on the best course of action for goal pursuit, and an implementation stage, focused on implementing these actions (for an overview, see Gollwitzer & Bayer, 1999). For example, consider an aspiring guitarist taking part in a workshop delivered by an expert guitar player. Admiring the expert’s mastery in playing the guitar, he would probably first pay very close attention to the different actions of the expert and decide which one is most likely to produce a specific sound (the deliberative stage) and then attempt to imitate the expert’s action thought most likely to produce a the desired sound (the implementation stage). Therefore, we propose that admiration facilitates the focus of attention and cognitive resources to reflect on how the admired person achieves their performance or skill, and this step is likely to be particularly important in the case of complex actions (Gollwitzer & Bayer, 1999).

The proposition that admiration is related to attention and cognitive processing preceding social learning can be subject to empirical exploration, for instance by using eye gaze measures to explore attention focus or recall tasks to test memory effects. On a broader theoretical level, admiration as an emotion performing a learning function is an ideal candidate for further exploring the role of emotions in encouraging feedback and reflection on the emotion stimulus (Baumeister et al., 2007).

Imitation

Admiration, however, is not just associated with reflection; it energizes the admirer towards social learning. Algoe and Haidt (2009) found that participants reported admiration to be associated with increased energy, heart rate, and muscle tension,

suggesting action readiness. We argue that this action readiness is geared towards emulating the skill of the target, so that admiration is associated with an action tendency (Frijda, 1986) to imitate the admired skill or technique. This tendency to imitate is supported by admiration's association with intentions to learn from the admired person or group (Algoe & Haidt, 2009; Onu, Smith, et al., 2014; Schindler et al., 2015; Sweetman et al., 2013), and reflects admiration's function for social learning (Fessler & Haley, 2003; Haidt & Seder, 2009; Henrich & Gil-White, 2001). As noted earlier, however, empirical evidence for its energizing role is equivocal. However, the proposition that admiration is associated with an action tendency for social learning does not imply that the act of imitation will occur each time a person feels admiration. Whether imitation of an admired model does occur will depend on contextual and motivational factors, such as whether modeling is appropriate in the situation (Bandura, 1977) and whether it is consistent with the person's goals (Gergely, Bekkering, & Király, 2002). Drawing on goal-directed action research, likely moderators of the relationship between admiring and reflecting on the target's competence, on the one hand, and pursuing imitation, on the other, are the feasibility of imitation (whether it can be done at the time) and its desirability (whether it is beneficial within the given context) (Gollwitzer & Bayer, 1999). Rather than seeking to establish whether admiration does instigate behavior or not, it may be more useful for future research to look at such moderating variables in the relation of admiration to modeling.

Thus, we propose that admiration is associated with a tendency to imitate the admired target, but that motivational and situational factors will determine whether the act of imitation does occur. Algoe and Haidt (2009) have found that participants report feeling more energized to achieve their goals in general, and not only to imitate the specific admired skill. This tendency to pursue general achievement may be due to participants not necessarily admiring the particular skill of the admiration target, but a

higher-order ability or trait (such as perseverance or ambition). It may also be due to a general propensity of positive emotions to encourage self-transcendence, including working harder to pursue one's goals (Fredrickson, 2001).

Social Functions of Admiration

We propose reflection and imitation as the immediate consequences of admiration, serving its social learning function. However, as a social emotion, admiration has a range of secondary consequences at various social levels (Keltner & Haidt, 1999), which we have discussed earlier. We will briefly reiterate some of the consequences below in order to discuss the broader social functions of admiration.

Because admiration is elicited by competence exceeding standards, it can perform a communication function (Keltner & Kring, 1998), signaling to the admired person that they possess an admirable performance or skill. Little attention has been given in admiration research to how admiration regulates the relationship between the admirer and the admired person. There is some indication that the admirer will seek proximity with the admired person (Henrich & Gil-White, 2001) and that admiration is associated with increased willingness to receive help (Onu, Smith, et al., 2014), but there is little indication of what the admired person will do in response to being admired. Since admiration would signal to them that they possess a prestigious skill, being admired should signal to the person that they possess high status (Henrich & Gil-White, 2001), which in turn would elicit pride (Tracy, Shariff, & Cheng, 2010). As such, being admired would be rewarding and the admired person should be motivated to prolong contact by accepting and encouraging the admirer's proximity and sharing their skills. Admiration should thus be involved in a host of relationships based on skill sharing, such as teacher-student or group leader-follower relationships. Group-based admiration, as well, should regulate relations between social groups, such as helping, knowledge-transfer, and cooperation relations (Cuddy et al., 2007; Onu, Smith, et al., 2014).

Ultimately, due to its function of signaling to the admired person that they are recognized by the admirer as excellent and of high social standing, admiration will serve to regulate merit-based hierarchy at group level (as shown in Sweetman et al., 2013). While pride has been shown to be involved in hierarchy regulation as individuals signal their own higher status by displaying pride (Tracy et al., 2010), admiration may signal the recognition of higher status in others.

On a broader cultural level, the social learning from skilful individuals facilitated by admiration will lead to the transmission of skills and techniques among members of the social group (Henrich & Gil-White, 2001; see also Boyd & Richerson, 1985). Indeed, some authors propose that admiration has evolved in order to facilitate such skill transmission (Haidt & Seder, 2009). Therefore, on the most inclusive level of human society, admiration serves an essential function for cultural transmission.

Conclusion

Admiration for others encourages people to learn valuable skills (Immordino-Yang & Sylvan, 2010) and praise those of extraordinary talent (Algoe & Haidt, 2009). Admiration for other groups helps build positive intergroup relationships, even between groups of unequal status (Onu, Smith, et al., 2014). Given its role and potential implications, it is surprising that so little research has been conducted on admiration, in psychology (Haidt & Seder, 2009) or the broader social sciences (Storey, 2011), although this does reflect a general tendency to focus emotion research on basic, negative emotions rather than complex, social emotions (Haidt & Morris, 2009; Immordino-Yang, 2011).

The study of admiration may help inform a variety of research areas. Haidt and Seder (2009) propose that admiration has evolved to facilitate social learning, and the study of admiration can provide insight into one of the psychological mechanisms that underlies the cultural evolution of complex human societies (Boyd & Richerson, 1985). It

can also provide insight into how we relate to the talented individuals in our societies and why we bestow them with higher social status (Henrich & Gil-White, 2001), and how we maintain and regulate such status hierarchies (Sweetman et al., 2013). Admiration may also provide insight into the nature of upward social comparison, and what drives people to prefer upward comparison targets in certain situations (Collins, 1996).

The study of admiration is also valuable for advancing emotion theory. We proposed that attention and cognitive processing of the admired stimulus is an essential outcome of admiration, in line with the view that many emotions encourage feedback rather than immediate action tendency (Baumeister et al., 2007). Given its links to reflection and learning, admiration is an ideal candidate to illustrate the feedback and learning functions of emotion. As well, the study of admiration would contribute to understanding the less-investigated positive emotions (Fredrickson, 2001), and in particular positive social emotions (Haidt & Morris, 2009). The case of admiration provides support for the self-transcendence effect of such positive social emotions (Haidt & Morris, 2009), although this self-transcendence occurs in the competence and skill domain, and not in the moral domain as in the case of those emotions investigated in past research. As the study of admiration also needs to distinguish it from related states and emotions, it should inform the communalities and differences of admiration and related emotions, such as awe (Keltner & Haidt, 2003), elevation (Haidt, 2000; Schnall et al., 2010; Silvers & Haidt, 2008), adoration (Schindler et al., 2013), and envy (Smith & Kim, 2007), and the related motivational state of inspiration (Thrash & Elliot, 2004).

Although the knowns about admiration point to a fascinating emotion, the empirical evidence is limited, and there is room and scope for further development. The unknowns in admiration research are equally fascinating, and we have suggested several routes for further research looking at the role of admiration in how people relate to the

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most talented individuals, in how they learn from them, and ultimately how admiration contributes to wider cultural transmission.

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Table 1.

Admiration and related emotions - Summary

Related emotion	Distinction from Admiration					
	Theoretical predictions			Empirical evidence		
	Valence	Elicitors	Actions	Valence	Elicitors	Behaviors
Elevation	Same valence (positive)	Elevation is elicited by moral excellence, while admiration by non-moral excellence (Algoe & Haidt, 2009)	Elevation motivates being kind to others, while admiration motivates self- improvement (Algoe & Haidt, 2009)	Algoe and Haidt (2009)	Algoe and Haidt (2009)	Algoe and Haidt (2009)
Gratitude	Same valence (positive)	Gratitude is elicited by being beneficiary of another's moral excellence, while admiration and elevation are	Gratitude motivates repaying the benefactor, while admiration only motivates praising the admired to others (Algoe &	Algoe and Haidt (2009)	Algoe and Haidt (2009)	Algoe and Haidt (2009)

		elicited by excellence witnessed, but not targeted to the self (Algoe & Haidt, 2009)	Haidt, 2009)			
Awe	Same valence (positive)	Admiration is elicited by excellence in others, while awe is elicited by ability so extraordinary that it is difficult to grasp (Keltner & Haidt, 2003)	While admiration motivates self-improvement, awe motivates passive contemplation and submission (Keltner & Haidt, 2003)	No empirical evidence	No empirical evidence	No empirical evidence
Envy	Opposite valence (envy has a negative valence)	Authors agree that both envy and admiration are elicited by the competence of others, but some authors believe that	Admiration is either viewed as an energizing emotion, motivating self-improvement, as opposed to envy (Smith, 2000;	Van de Ven et al. (2011)	- Admiration occurs in attainable conditions: Onu, Smith, et al. (2014)	- Admiration is energizing: Algoe and Haidt (2009); Immordino-Yang et al. (2009)
		believe that	(Smith, 2000;	occurs in	- Admiration occurs in	- Admiration

		admiration is triggered by believing the admired target's ability is attainable for the self (e.g., Smith, 2000), while others support the opposite view (Van de Ven et al., 2011)	Immordino-Yang, 2011); or as a passive emotion, opposed to envy which motivates improvement (Van de Ven, 2011).		unattainable conditions: Van de Ven et al. (2011)	is passive, envy is energizing: Van de Ven et al. (2011)
Adoration	Same valence (positive)	Admiration elicited by attainable excellence, while adoration by excellence not attainable or fully understood (Schindler et al., 2013).	Admiration leads to emulation, while adoration elicits the desire to affiliate and unite to the target (Schindler et al., 2015).	Schindler et al. (2015)	Schindler et al. (2015)	Schindler et al. (2015)

Table 2. *Measures of admiration - Summary*

<i>Measure</i>		<i>Theoretical implications</i>	<i>Employed in</i>
Self-report	Emotion lists	The subjective experience of admiration	Algoe and Haidt (2009); Cuddy et al. (2007); Fiske et al. (2002)
	Scales	The subjective experience of admiration	Onu, Kessler, et al. (2014) ; Schindler et al. (2015)
	Interview	In-depth exploration of the subjective experience of admiration	<i>No studies found employing this method</i>
ANS response	Heart rate	Level of arousal of admiration	Immordino-Yang et al. (2009)
	Respiration rate	Level of arousal of admiration	Immordino-Yang et al. (2009)
	Galvanic skin response	Level of arousal of admiration	<i>No studies found employing this method</i>
	Startle response	Level of arousal of admiration	<i>No studies found employing this method</i>
Brain state	fMRI	Investigated the cognitive processes surrounding admiration (e.g., for instance, useful in determining the appraisals associated with the elicitation of admiration as well as connected behaviors)	Immordino-Yang et al. (2009)
	EEG	Provides insight on the placement of admiration on the approach-avoidance continuum	<i>No studies found employing this method</i>
Behavioral measures	Facial expression	Could indicate emotional specificity – admiration’s unique physiological manifestation	<i>No studies found employing this method for measurement</i> (cf. Adolphs, Baron-Cohen, and Tranel, 2002, who employed an

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		admiring expression to elicit admiration)
Voice characteristics	Could indicate emotional specificity, as well as indicate the level of arousal	<i>No studies found employing this method</i>

Table 3. *Elicitors of admiration*

Elicitor	Manifestations	Relation to admiration	Investigated in
Excellence	Ability, skills	Positive	Algoe & Haidt (2009); Immordino-Yang et al. (2009)
	Competence	Positive	Cuddy et al. (2007); Fiske et al. (2002); Onu, Kessler, et al. (2014)
	Prestige	Positive	Fessler & Haley (2003) – <i>theoretical only</i>
	Legitimate status / deservingness	Positive	Onu, Smith, et al. (2014); Van de Ven et al. (2011)
	Prototypicality	Positive	Onu, Kessler, et al. (2014)
Attainability		Debated relation:	
		(a) Positive	(a) Onu, Smith, et al., (2014)
		(b) Negative	(b) Van de Ven et al. (2011)

Table 4. *Consequences of admiration*

Action	Relation to admiration	Investigated in
Consequences for the admirer		
Self-improvement	Debated relation: (a) Positive (b) No relation	(a) Algoe & Haidt (2009); Immordino-Yang et al. (2009); Schindler et al. (2015) (b) Van de Ven et al. (2011)
Learn / imitate	Positive	Algoe & Haidt (2009); Onu, Kessler, et al. (2014); Onu, Smith, et al. (2014); Schindler et al. (2015)
Consequences for the relationship		
Praising the admired	Positive	Algoe & Haidt (2009)
Willingness to receive learning-related help	Positive	Cuddy et al. (2007); Onu, Smith, et al. (2014)
Cooperation / Contact	Positive	Cuddy et al. (2007)
Consequences for the group		
Hierarchy change actions	Negative	Sweetman et al. (2013)

Figure 1. *A conceptual model of admiration*

