# THE BIG TWO DIMENSIONS OF DESIRABILITY

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#### Introduction

The varied papers in this volume are testament to the breadth of application of the two meta-dimensions, agency and communion. I will use the term *desirability* as synonymous with *positive evaluation* and argue that the broad influence of the agency-communion distinction can be traced to two distinct ways in which people evaluate themselves, other people, and questionnaire items. Whereas it has long been assumed that evaluation is unidimensional – that is, every stimulus can be rated on one dimen-sion from bad to good –I will argue that evaluation is bidimensional. This dual evaluation emanates from the fact that both agency and communion are desirable qualities.

# The multidimensionality of desirability

A problem overlooked throughout the long history of social desirability research is the bias created by attaching the word *social*: That qualifier biases judgments toward communally positive criteria (nice, cooperative, honest) to the detriment of agenti-cally positive aspects (productive, creative, intelligent). Thus it is no surprise that comprehensive trait ratings place likable,

helpful, and honest at the top of desir-ability ratings (Alicke, 1985; Bochner & Van Zyl, 1985). When the adjective *social* is removed, then traits such as intelligent and conscientious become just as highly rated (Hampson, Goldberg, & John, 1987; John & Robins, 1993). One goal of this chapter is to persuade readers that research on desirability should not be restricted to its communal aspects.

In principle, the dimensionality of desirability is infinite; that is, there are endless ways that a person or trait can be seen as desirable, depending on the rating context and the perceiver. Desirability in friends, workers, and romantic partners all have different connotations. And perceptions of the same individual

by a Pollyanna, a cynic, a family member, and a competitor are likely to differ substantially.

Yet everyday observers, as well as most psychologists, persist in viewing desirability as unidimensional. That traditional view, clearly articulated by Edwards (1957), as well as Osgood, Suci, and Tannenbaum (1957), is that there exists an absolute dimension of evaluation (goodness, desirability) upon which we can map all personality traits. Based on this assumption, we often ask our subjects to rate traits according to their desirability scale values (DSVs). These values have been compiled in tables to be used for various purposes (e.g., Alicke, 1985; Edwards, 1957; Bochner & Van Zyl, 1985; Schönbach, 1972), including the equating of desirability in forced choice methods.

A number of personality researchers have claimed to extract a pure evaluative factor that is independent of content (Peabody & Goldberg, 1989; Leising et al., 2013). But the claim for unidimensionality loses credibility when confronted with the fact that the putative evaluation factor is inconsistent across domains. In the Big Five domain, it runs through Agreeableness (Peabody & Goldberg, 1989). In MMPI research, it runs through Neuroticism (Edwards, 1957). In multidimensional scaling work by Rosenberg and Sedlak (1972), the evaluative factor is Intellectual Positivity. Although one can run an evaluative factor through any dataset, there is no guarantee that it will generalize to other datasets (e.g., Irwing, Booth, Nyborg, & Rushton, 2012).

# Apples and oranges

To illustrate the weakness in the unidimensionality assumption, I ask readers to consider the following exercise. Examine these four items (panda, university, rose, cypress tree) and order them (from low to high) with respect to desirability. Readers may find this difficult. Try the same exercise with these three groups of people (saints, supermen, and children).<sup>2</sup> Surely it makes little sense to evaluate incommensurate, qualitatively different objects (i.e., apples and oranges). Nonetheless, research psychologists have no qualms about asking subjects to rate such discrepant traits as honest, wise, and friendly on the same continuum. It seems that we're asking our subjects to do the impossible. As noted below, however, they seldom complain!

So far, my approach has been to ask readers to experience the difficulty of comparing apples and oranges. But there are more empirical and objective sources of evidence. Together they build a strong case for the multidimensional nature of evaluation.

# Factoring item desirabilities

One direct approach is to examine the structure of desirability ratings – as opposed to the structure of self-ratings, the standard approach to factoring personality. The two most prominent factor analyses of desirability ratings are those conducted

by Sam Messick (1960) and Nancy Wiggins (1966). Messick came up with nine factors; the first two corresponded to agentic and communal desirability, respectively. Similarly, Wiggins came up with six, including separate factors for agentic and communal desirability.

When limited to two factors, factor analyses of desirability ratings yield a clear result: agentic and communal evaluation – with comparable sizes (Carey & Paulhus, 2008). That result supports the claim that agency and communion predominate in evaluations as well as in self-ratings (Caruana, Lefeuvre, & Mollaret, 2014; Bruce & Paulhus, 1990).

#### Rater differences

Many traits are judged positively by some people and negatively by other people. If so, desirability scale values may show moderate means but bimodal distributions (Abbott, 1975). For example, the trait "conservative" is evaluated positively by half the people and negatively by the other half. Also, psychopaths often show evaluations that are the reverse of most raters. For example, psychopaths view "nasty" and "aggressive" as highly desirable (Buckels & Paulhus, 2017). Finally, there are individual differences in people's motivation to evaluate at all (Jarvis & Petty, 1996). Such rater differences add further evidence against the notion that desirability is unidimensional.

#### Context differences

Other research has established that evaluation of the same behavior can differ dramatically depending on the context in which it is rated (Ferris et al., 2010). One paradigm that illustrates this inconsistency is the simulation of job applications. Subjects are asked how they would promote themselves if applying for diverse jobs (Holden et al., 2003; Bruce & Paulhus, 1990). Traits that were rated as desirable for the social worker position (e.g., empathy, nurturance) were not rated as desirable for a position as a military drill instructor.

Note that all subjects in this research were asked to answer as if they were "faking good." So apparently the word "good" changes meaning quite fluidly across contexts. By limiting the context to job applications, this paradigm permits control over extraneous factors that would apply when desirability is compared across work vs. home or relationship contexts (e.g., Block, 1961).

Another classic example is the way in which desirability changes meaning with the gender of the target being rated. Sandra Bem (1974) collected desirability ratings of traits (a) when applied to men and (b) when applied to women. The differences in these desirability ratings – sometimes drastic – were used to develop Bem's theory of psychological androgyny. Individuals who rated both kinds of traits as desirable were gifted with the label *androgynous*. Interestingly, these two clusters of traits were later demonstrated to tap agency and communion (Wiggins & Holzmuller, 1981).

# The dynamics of desirability

Dendy Erraumus

The flexibility of human cognition allows people to move easily from simplicity to complexity (Suedfeld, 1992). Simple decisions favor speed and a comfortable world-view. Although people trend to simplicity under high load conditions, they can distinguish multiple desirability factors when given time and encouragement to do so (Paulhus, Graf, & Van Selst, 1989).

But if evaluation is so complex, why don't raters complain? It appears that judges automatically incorporate context into their decisions (Ferris et al., 2010); that is, all evaluations are contextualized, but people are unaware of this process and fail to notice when they change criteria for evaluation. In short, evaluation is an implicit, automatic process (Chen & Bargh, 1999; Jarvis & Petty, 1996).

Nonetheless, the bidimensional evaluative pattern emerges over and over. One reason is the bidimensional nature of human values that trigger the bidimensional evaluation. The other is context associated with agency (e.g., competition and achievement) or communion (e.g., cooperation and nurturance). I will consider both in detail below.

#### **Fundamental** values

The predominance of agency and communion in analyses of evaluation springs from the two underlying values (Locke, 2000; Trapnell & Paulhus, 2012). The Locke measures are scored according to dyadic interactions, whereas the Trapnell and Paulhus measures are more global in nature.<sup>3</sup> In the analysis by Paulhus and John (1998), the triggering of values is the first step in a cascade that causes a bias in favor of agentic or communal evaluations and eventual behavior.

# Priming by context

Agentic and communal values can also be primed by context. The ease with which judges can alter the weighting of dimension is exemplified by Sherman, Mackie, and Driscoll (1990). Before evaluating political candidates, subjects were primed with an agentic dimension (forging foreign policy) or a communal one (taking care of home citizens). Depending on which dimension was primed, the evaluation of candidates was reversed. In short, evaluation is a very pliable factor.

Hence, it is not surprising that the relative impact of agentic and communal values also varies across applications. In terms of categorization speed, communion takes precedence (Abele & Bruckmüller, 2011). In terms of impact on self-esteem, agency takes precedence (Wojciszke, Baryla, Parzuchowski, Szymkow, & Abele, 2011; but see also Abele & Hauke, this volume). Although human judgment can operate at varying degrees of complexity, it may be that the two-factor level of agency-communion is the optimal level for everyday cognition (Rosch & Mervis, 1975).

#### Self-enhancement

Whether the trigger is fundamental values or context, individual differences in self-enhancement emerge in both agentic and communal contexts. However, the nature of enhancement differs qualitatively (Paulhus & John, 1998). In agentic contexts, the enhancement has an egoistic flavor with an exaggerated sense of intelligence, creativity, and overall competence. In communal contexts, the enhancement has a moralistic flavor with an exaggerated sense of moral superiority (see Gebauer & Sedikides, this volume).

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# The big picture

In summary of my model of agency-communion dynamics, I have argued in a series of reports for a specific developmental sequence (Paulhus, 2002; Paulhus & John, 1998; Trapnell & Paulhus, 2012). It begins with the differential socialization of two fundamental values, triggering two forms of self-enhancement, and culminates in two identities that play out in observable behavior. Whether the identity is agentic or communal, it necessarily includes some reality and some enhancement (Hogan, 1983).

Given all this evidence for duality, why is desirability so often assumed to be unidimensional? One reason is that people overlook its subjectivity (e.g., "I heard it was a good movie") and rely on pluralistic ignorance (Prentice & Miller, 1996). By ignoring alternative viewpoints, people avoid the challenges of dealing with complexity (Neuberg & Newsom, 1993).

This pressure toward simplicity in trait perception is clearly exemplified in the so-called halo effect (Thorndike, 1920): information that a target individual is positive on one characteristic tends to increase the likelihood that he/she will be rated positively on other characteristics. As a result, a constellation of complex acquaintances can more easily be arrayed from good to bad. The cognitive economy of collapsing multiple dimensions to facilitate approach-avoidance decisions is nothing less than critical for human survival (Emler, 1990; Pinker, 2005).

# Two important implications

The most important implications of this chapter are that agentic and communal desirability be distinguished in (1) the measurement of desirable responding, and (2) the systematic scaling of attribute desirabilities.

# 1. Measures of desirable responding

The first implication concerns so-called social desirability scales, which have a long history in psychological assessment (for the most recent review, see Holden & Passey, 2009). These instruments were designed to capture individual differences in the tendency to give desirable responses on self-reports. Because they refer to

individual differences in response styles, not to desirable characteristics, the term socially desirable responding (SDR) or simply desirable responding (DR) is preferable

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(Paulhus, 2017).

A variety of such measures have appeared in the assessment literature (for a detailed review of individual scales, see Paulhus, 1984). Although serious measurement began with the MMPI validity scales (Hathaway & McKinley, 1951), the development of such measures accelerated during the 1950s and 1960s. Although targeting the same concept, the item selection methods varied dramatically. Edwards's (1957) SD scale comprised the set of items receiving the highest desirability ratings in large surveys. Items on Wiggins's (1959) Sd scale were those showing the greatest change in claim rates between faking and honest conditions. The Marlowe-Crowne scale (Crowne & Marlowe, 1960) consisted of items that were (a) highly desirable, but rare, or (b) undesirable, but common. When compared empirically, the striking result was a lack of convergence among these scales. Clearly, desirable responding is not a unitary tendency (Holden & Fekken, 1989).

That singular lack of convergence motivated my early work on determining how many factors would emerge in a comprehensive comparison of all the prominent scales (Paulhus, 1984). Two clear factors emerged. The first was marked by such scales as the Edwards scale and Jackson's SD scale; the factor was labeled Self-Deceptive Enhancement to refer to an exaggerated self-positivity that the respondent actually believed. The second factor was marked by the Marlowe-Crowne scale and Eysenck's lie scale; it was labeled Impression Management to refer to self-positivity triggered by an audience. Other researchers have come to similar conclusions about the duality of desirability: Holden and Fekken (1989) used the labels Sense of General Capability and Interpersonal Sensitivity. For Dubois (2000), the corresponding labels were Social Desirability and Social Utility. Leising and colleagues (2013) preferred the labels Positive Self Regard and Claim to Leadership. Nonetheless, the similarity in labels is unmistakable.

This divergence in the two major factors culminated in my development of the Balanced Inventory of Desirable Responding (BIDR) (Paulhus, 1991). Consisting of two 20-item subscales, this measure is now the most widely used measure of desirable responding (Holden & Passey, 2009). Although its two subscales have received empirical support, they have also been critiqued for the difficulty of distinguishing desirable responding (i.e., response styles) from actual personality traits (i.e., content). In other words, some respondents claiming the desirable options on the BIDR may actually possess those two desirable traits. If so, the BIDR subscales may be measuring two personality traits (de Vries, Zettler, & Hilbig, 2014; McCrae & Costa, 1983). The fatal flaw with this content argument is that these two traits only appear in studies of social desirability, self-enhancement, or bias; they never appear as factors of personality.

Nonetheless, in 2002, I reconsidered the issue of content vs. style in SDR scales (Paulhus, 2002). To understand the distinctive behavior of personality factors and SDR factors, I turned (with Oliver John) to the meta-factors of agency and communion (Paulhus & John, 1998). We argued that these meta-factors were more

environmental in origin and tended to increase correlations among the Big Five factors. Our reasoning followed Hogan (1983) in recognizing that children are socialized to seek two broad goals in life: "getting along" (communion) and "getting ahead" (agency). Whenever activated, these motives can simplify the usual five-dimensional personality structure to appear more bidimensional.

As a result, two second-order factors often emerge when factoring the correlations among the Big Five traits (e.g., DeYoung, Peterson, & Higgins, 2002; Digman, 1997). Although the latter researchers use different labels, the correspondence with agency and communion is hard to ignore. As noted earlier, the bidimensionality also becomes apparent when self-reports are collected under speeded or stressful conditions (Paulhus et al., 1989).

# 2. Desirability scale values

Because they do not take into account the multidimensionality of SD, all tabled desirability scale values are misleading, if not meaningless (Messick, 1960). Some receive high ratings because they emphasize agentic positivity (e.g., intelligent, conscientious, creative). Others receive high ratings because they emphasize communal positivity (e.g., warm, helpful, dependable). Therefore, a tabled value may reflect its agentic desirability, its communal desirability, or some combination of both. A colleague and I are now collecting both desirability ratings on the same sample (Ziegler & Paulhus, 2017).

One common use of such ratings is to equate the desirability of matched pairs in forced choice formatting (Jackson et al., 2000; Nederhof, 1985). The goal of this procedure is to control social desirability so that respondents will not simply be using that criterion to choose an answer. To obtain a match, however, it is likely that one choice is agentic and the other communal. Therefore, item content is being introduced by the back door. For example, assessors would balk at assessing self-reported intelligence by forcing a choice between "smart" and "dumb" – because of a clear desirability confound. Instead, "smart" might be compared with "kind," a trait with equally high desirability but communal instead of agentic. Of course, the problem is avoided when the two options are relatively neutral to begin with: For example, "I love big parties" vs. "I avoid big parties."

Although it doesn't always guarantee control over desirable responding, the forced choice procedure was put to good use in assembling the Narcissistic Personality Inventory (Raskin & Terry, 1988). Respondents were forced to choose between "I would make a great world leader" and "In most ways, I am an average person." This was a clever way to determine if respondents would choose agentic desirability over communal desirability – the fundamental dynamic of narcissism.

#### Conclusions

Desirability doesn't lie in the trait. It's not an inherent property. Instead, it's the result of a process of considering the implications of personal qualities within an

interpersonal context. In principle, there is an infinite number of contexts, so the same trait can be evaluated as desirable, undesirable, or neutral depending on the context and the judge.

Nonetheless, given the fact that two fundamental human values are especially prominent, evaluations tend to center on agency and communion. Each situation tends to trigger one or the other (with some cross-talk).<sup>5</sup> Despite the complexity of human interactions, agency and communion represent the two largest clusters of traits, motives, and behavior (Wiggins, 1991). As a result, people tend to generalize their responses to one of those two implicit contexts.

Any appearance of a global desirability factor in multivariate research necessarily summarizes some unspecified combination of goals, contexts, and group differences. Although adaptive for lay cognition, it appears that this evaluative oversimplification may have had a detrimental effect on the history of psychometrics.

#### **Notes**

- 1 Some rating instructions use labels that are explicitly communal. For example, Anderson (1968) asked respondents to rate the "likableness" of 555 personality trait words (also Schönbach, 1972).
- 2 See Brown (1986) for other examples.
- 3 Note that the popular Schwartz value model forces agency and communion to be in opposition by ipsatizing the value ratings (Schwartz, 1992).
- 4 Nonetheless, to avoid such critiques, alternative approaches that are more objective in nature have been developed and validated (see Paulhus & Holden, 2010).
- 5 Cross-dimensional influence of agency and communion is discussed in detail by Yzerbyt (this volume) as well as by Judd and colleagues (2005).

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