Coolness: An Empirical Investigation

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Abstract. Some people are routinely described as "cool," but it is unknown whether this descriptor conveys trait-like information beyond mere likability or popularity. This is the first systematic quantitative investigation of coolness from a trait perspective. Three studies of North Americans (N = 918) converged to identify personality markers for coolness. Study 1 participants described coolness largely by referring to socially desirable attributes (e.g., social, popular, talented). Study 2 provided further evidence of the relationship between coolness and social desirability, yet also identified systematic discrepancies between valuations of coolness and social desirability. Factor analyses (Studies 2 and 3) indicated that coolness was primarily conceptualized in terms of active, status-promoting, socially desirable characteristics ("Cachet coolness"), though a second orthogonal factor ("Contrarian coolness") portrayed cool as rebellious, rough, and emotionally controlled. Study 3, which examined peer valuations of coolness, showed considerable overlap with abstract evaluations of the construct. We conclude that coolness is reducible to two conceptually coherent and distinct personality orientations: one outward focused and attuned to external valuations, the other more independent, rebellious, and countercultural. These results have implications for both basic and applied research and theory in personality and social psychology.

Keywords: coolness, social desirability, attitudes, personality

Coolness is ubiquitous in 21st-century life. Figuring out how to be "cool" is arguably a rite of passage in the network of many modern cultures that have otherwise abandoned rites of passage. Most of those who pursue cool status can be frustrated by its elusiveness and fickleness, even as easy attainment of coolness is promised by consumer products and services worldwide. The term "cool" is routinely used to describe various individuals, but does such a descriptor truly contain trait-like information above and beyond its indication of likability and peer approval? And to the extent there is disagreement on what cool is, what kinds of coolness valuation are most common?

Researchers from diverse disciplines have offered theoretical and qualitative accounts for coolness (e.g., Connor, 1995; Danesi, 1994; Frank, 1997; Majors & Mancini Billson, 1992; Nancarrow, Nancarrow, & Page, 2002; Pountain & Robins, 2000). The present studies add to these accounts by offering the first systematic, quantitative examination of what characteristics recur in popular understandings of the cool personality. In order to study the construct of coolness, we use a nomological net approach (Cronbach & Meehl, 1955), examining convergent and discriminant validity with respect to other constructs. We base our reasoning partly on a lexical hypothesis (Goldberg, 1993) that the construct of coolness has become embedded in language because it reflects a meaningful dimension of variation conveying information about persons. Our approach does

not test specific hypotheses directly, but is nevertheless relevant to evaluating various scholarly accounts of the construct (e.g., Danesi, 1994; Frank, 1997; Majors & Mancini Billson, 1992; Pountain & Robins, 2000) with regard to how well these accounts capture popular understandings of coolness. Thus, we aim to identify a conceptual framework by which all hypotheses about cool may be tested in subsequent research.

Colloquial Coolness and a Lexical Perspective

The appeal of coolness is presumably enhanced by the mysteriousness of what cool actually is. Although marketing researchers interested in anticipating changes in consumption trends have put much time and money into "cool hunting" (Southgate & Cogent Elliot, 2003), no standard paradigm for this pursuit has emerged. Moreover, the valuation of cool has likely had a significant social and psychological impact both within its communities of origin and beyond. Any culture that values specific individual differences or traits will influence individuals to comport themselves according to those values, thus facilitating social norms that could profoundly influence behavior (Ajzen, 1991; Fishbein & Ajzen, 1975). The goal of the present research is to determine what those in a coolness-valuing culture mean when they say cool.

Dictionaries often define the slang use of cool as essentially meaning socially desirable, for example, "very good," "excellent," or "all right" (Landau, 1983). From a lexical tradition (Allport, 1937; Goldberg, 1993), this is informative – the slang form of coolness has likely become normalized in the English language because it offers reliable guidance on how to comport oneself in a positively-valued way. Insofar as coolness is a marker of apparently desirable characteristics, it also denotes observable criteria for social inclusion or exclusion.

The main question we consider here is whether coolness is merely a reflection of content-free social desirability or whether "cool," across individuals and groups, is trait-like, denoting specific patterns of basic characteristics. The idea that there is a potentially infinite set of ways to be cool may appear plausible when considering the sometimes extreme subcultural and generational differences in judgments of which musical groups, movie stars, pop idols, art forms, and clothing styles are considered cool. But such diverse manifestations of preferences for specific individuals or cultural products are not necessarily preferences for different personality characteristics. Personality valuation does tend to vary across contexts (e.g., Caspi, Roberts, & Shiner, 2005), but not as wildly or inexplicably as preferences for specific cultural icons, products, or fashion trends.

Prior research suggests that there is content to coolness beyond mere likability and desirability. Youthfulness (Martino, 2000), sexual appetite (Strodtbeck, Short, & Kolegar, 1962), risk taking (Martin & Leary, 2001), toughness (Aloise-Young & Hennigan, 1996; Denborough, 1996; Rodkin, Farmer, Pearl, & Van Acker, 2000), masculinity (Czopp, Lasane, Sweigard, Bradshaw, & Hammer, 1998; Denborough, 1996; Martino, 2000), muted emotion (Beckerleg, 2004; Erber, Wegner, & Therriault, 1996), rebelliousness (Eggertsen, 1965), and rejection of effortful striving (Czopp et al., 1998; Osborne, 1999; Williams, Burden, & Lanvers, 2002) are all presumed to be cool in contemporary Western cultures. The valuation of coolness has also been linked to bullying, gang membership, and interpersonal violence (Denborough, 1996; Houndoumadi & Deree, 2001; Strodtbeck et al., 1962), as well as to smoking and drug use (Griffin, Epstein, & Botvin, 2001; Martin, & Leary, 2001; Plumridge, Fitzgerald, & Abel, 2002). Despite this rich literature addressing the concept of coolness, these studies all share a notable weakness: Researchers have yet to attempt to systematically and quantitatively outline the key features of coolness. The present studies represents the first step in establishing some well-defined operationalizations of the construct

For coolness to be linked to specific behaviors or attitudes such as drug use or opposing authority, it ought to represent some specific set of attributes that cut across the coolness of specific objects, practices, places, and people. That is, coolness may have some shared intersubjectivity in its referents – or the word would not have enough shared meaning to justify its common use in English (and increasingly in other languages).

Contemporary Accounts of Coolness

Diverse accounts present the content of coolness in broadly overlapping ways. A common origin story for coolness as a slang expression in English is that it grew out of the jazz era and conveyed a kind of innovative fashionability (Pountain & Robins, 2000). This slang form also merged with an older nonslang, personality-relevant meaning of cool as emotionally controlled. Among African-Americans, cool has arguably come to mean an impassive ironic stance highlighting a rejection of the dominant culture's value system (Majors & Mancini Billson, 1992). It is perhaps not an accident that the menthol cigarette Kool was heavily marketed to African Americans in the 1960s (Gardner, 2004). Later, in popular American culture, attaining coolness gradually became a kind of rite of passage even for white middle-class adolescents not obviously suffering from societal oppression (Danesi, 1994). Thus, coolness is commonly understood in terms of adolescent development and rebelliousness (e.g., Danesi, 1994) rather than in racial or historical-political terms. Coolness valuation is arguably influential well into adulthood as well (Pountain & Robins, 2000)

Coolness could even be considered a cultural style particularly suited to consumer societies insofar as these societies thrive on adolescent impulsiveness and noveltyseeking in their constituent populations (Frank, 1997). Cultural critics of cool often argue, in fact, that despite its independent, innovative, and antiauthoritarian pose, coolness bolsters an atomized and novelty-oriented construction of the self that is a prime target for consumer products that quickly become obsolete and call for regular replacement (Frank, 1997; Heath & Potter, 2004; Lasn, 1999). Belk, Tian, and Paavola (2010) find support for an overlap between coolness and consumerism in their qualitative research among American and Finnish young adults. The authors found, for instance, that most American youth gave brand names rather than styles when asked what clothing fashions were cool (p. 199).

At the same time, scholarly perspectives converge on the idea of coolness as a kind of rebellious and emotionally self-protecting stance against what is perceived to be mainstream (Frank, 1997; Heath & Potter, 2004; Lasn, 1999). For coolness to be linked to specific behaviors such as drug use, or attitudes such as antiauthoritarianism, it ought to represent some specific essence or set of discernible characteristics. Though there may be cultural, subcultural, gender, and generational disagreement on what is cool, there may be a finite number of predominant guiding frameworks.

Coolness and Social Desirability

It is possible that some of the guiding frameworks of cool – perhaps even the predominant guiding frameworks – are relatively unrelated to any historical origin of the construct.

The popular essence of what is considered cool today may simply be what most people think they are supposed to find desirable. In this case, cool preferences would be preferences for nonspecific positive dispositions and abilities (e.g., sociability, positivity, intelligence, valued physical characteristics), even as coolness continues to be conceptualized as an alternative value system. It is an empirical question how much conceptual overlap coolness has with more conventional notions of desirability, and whether there is anything more to coolness than this overlap.

The Present Studies

Our research integrates several complementary approaches to investigate the popular overlap in perceptions of coolness and social desirability. In addition, we employ various analyses to tease apart a sense of coolness that is meaningfully distinct from conventional notions of what is acceptable or desirable.

In Study 1, participants generated characteristics that they perceived to be cool. In Study 2, two samples of participants rated dozens of these characteristics on two dimensions: coolness and social desirability. We first assessed the correlation between coolness and social desirability, and then examined the possible distinction between these constructs. We also conducted an exploratory factor analysis to simplify the diverse perceptions of cool into a few distinct patterns of judgment. Lastly, in Study 3, participants rated friends both on their coolness and on a variety of personality descriptors that were identified as relevant in the previous studies.

Study 1

Study 1 served to determine people's unprompted understanding of what it is to be cool. Participants generated attributes, behaviors, and individuals that they associated with the word cool. In keeping with the personality focus of our research, this study reports only the attributes.

Method

Participants

Respondents (205 female, 102 male, and 46 who did not indicate their sex) to an advertisement completed an internet study on coolness in return for a chance to win a cash prize. Their ages ranged from 15 to 56 years (M = 21.23, SD = 4.35). Respondents were predominantly of European (n = 162) or Asian (n = 127) ethnicity; 64 were of other or unidentified ethnicity.

Procedure and Materials

Advertisements posted on bulletin boards at a large Canadian university invited people to log on to a website and participate in a study about coolness. Once logged on, participants were shown a consent form and indicated their willingness to participate in the study. Participants were asked to generate between five and eight adjectives that they personally associate with coolness.

Results

Coolness Characteristics

Participants generated 1,639 entries for the adjectives associated with coolness. Most of the entries appeared once (e.g., "accepted," "zealous"), though some of them appeared repeatedly [e.g., "confident" (54 times), "awesome" (23 times)] or in different variations [e.g., "attractive" (28 times), "beautiful" (5), "handsome" (5)]. Three of the authors read through the list of adjectives and independently generated overarching semantic categories. Following the individual generation of categories, the authors reached consensus on how to categorize the adjectives, and these categories are listed in Table 1¹. Two trained research assistants, blind to the overall purpose of the investigation, grouped the adjectives judged to reflect a coherent semantic category (87% agreement). The most widely mentioned attributes were those representing friendliness, personal competence, and trendiness. Adjectives that reflected positive undefined elements were also common, but adjectives that reflect the kind of coolness described in previous scholarly work (Danesi, 1994; Frank, 1997; Pountain & Robins, 2000) such as rebelliousness, roughness, and muted emotions were not.

Table 1. Frequency of coolness-related adjectives and their categories (Study 1, N = 353)

| Category | No. of entries | No. of different adjectives | Examples of the adjectives |
|------------------------|----------------|-----------------------------------|----------------------------|
| Friendly | 167 | 14 | social, popular |
| Personal competence | 166 | 26 | smart, talented |
| Trendy | 141 | 16 | current, hip |
| Desirable | 98 | 23 | awesome, great |
| Attractive | 91 | 15 | handsome, hot |
| Unconventional | 81 | 10 | individualist, unique |
| Prosocial values | 71 | 25 | caring, honest |
| Humorous | 66 | 5 | funny, hilarious |
| Confident | 65 | 6 | assured, self-assured |
| Emotionally controlled | 61 | 12 | aloof, calm |
| Hedonist | 53 | 3 | fun, partyer |

¹ To conserve space only categories that received over 50 mentions were reported.

Discussion

Study 1 offers evidence that popular understandings of coolness do not adhere to a specific, highly-constrained set of characteristics. Overall, perceptions of positivity and social desirability appeared to guide judgments of coolness. The adjectives generated focused mostly on personality traits or positively-valenced descriptors. Beyond generic attractiveness indicators (hot, sexy), very few people mentioned specific physical attributes. With regard to abilities, only intelligence, humor, and related abilities as well as more generic indicators of ability (talented) were mentioned.

The results illustrate why many perceive coolness as a "flavor of the month" phenomenon: clearly laudatory but nonspecific. Despite this heterogeneity, broad conceptual categories emerged from participants' unprompted responses. Thus, primary categories may have represented a set of core characteristics, while the heterogeneity of responses pointed to individual taste.

Study 2

From a qualitative perspective, the concepts of coolness and social desirability overlapped considerably in Study 1. Study 2 was designed to quantify the extent of the overlap between coolness and social desirability, and to demarcate specific criteria for coolness

Method

Participants

Two samples were recruited for the study: sample 1 was the same sample used in Study 1 (n = 353) and sample 2 included 155 students (22 men, 66 women)² recruited from Introductory Psychology courses.

Materials

Coolness Rating Questionnaire (Sample 1 and Sample 2)

All 508 participants were asked to rate the coolness (1 = very uncool, 7 = very cool) of 90 characteristics that had relevance to coolness and social desirability. The characteristics chosen, which were drawn from the attributes offered by individuals in a pretest as well as attributes identified in the scholarly literature (e.g., Frank, 1997; Heath & Potter, 2004; Majors & Mancini Billson, 1992; Pountain & Robins, 2000), reflected 14 coolness and desirability-relevant categories: unconventionality, emotional control, irony, rebelliousness, roughness,

thrill-seeking, confidence, prosocial values and virtues, attractiveness, personal competence, drive for success, hedonism, trendiness, and friendliness. We determined these 14 categories by face value judgment as the 90 traits evaluated were too numerous to reduce by factor analysis given the size of the sample.

Social Desirability Rating Questionnaire

A subsample of participants from sample 1 (n = 297) rated the same set of characteristics on how socially desirable they considered them to be ($1 = very \ socially \ undesirable$, $7 = very \ socially \ desirable$).

Coolness vs. Social Desirability Rating Questionnaire

Sample 2 participants used a 6-point scale to determine whether they considered a characteristic more cool or more socially desirable (1 = much more cool, 6 = much more socially desirable). We explained that in cases in which a characteristic was perceived as both cool and socially desirable (or neither cool nor socially desirable), participants should indicate the degree to which coolness or social desirability (or lack thereof) was a more dominant feature of the characteristic.

Demographics

Participants were asked to indicate their age, sex, and ethnic background.

Procedure

Sample 1 participants completed the materials on the internet. They logged on to the study's website on which they were informed of their rights as participants in a consent form followed by a page that asked for their e-mail address as contact information to notify them of lottery results. Following some open-ended questions, participants were asked to complete the Coolness Rating Questionnaire followed by the Social-Desirability Rating Questionnaire and demographics. Sample 2 participants completed a paper-and-pencil version of the Coolness Rating Questionnaire followed by the Coolness vs. Social-Desirability Questionnaire and demographics in a take-home package, which they returned in exchange for course credit.

Results

Correlations Between Coolness and Social Desirability Ratings

For each of the 90 characteristics evaluated, there was a positive and significant correlation between the character-

² Data regarding the sex of 67 participants were not collected due to an administrative error.

Table 2. Correlations and mean differences between the categories' rating on coolness and social desirability (Study 2)

| ~ · | | Paired-sample t ^b (df) ^c | ple One-sample $t^b(df)^c$ | |
|--------------------------|-----|--|----------------------------|--|
| | | (Sample 1) | (Sample 2) | |
| More cool than desirable | | - | - | |
| Emotional control | .41 | 13.34*** (188) | 7.90*** (142) | |
| Hedonism | .32 | 2.66**(282) | 5.86*** (151) | |
| Irony | .46 | 9.35*** (289) | 13.49*** (153) | |
| Rebelliousness | .31 | 9.43*** (194) | 15.36*** (143) | |
| Roughness | .37 | 7.90*** (284) | 17.88*** (151) | |
| Thrill-seeking | .24 | 11.25*** (284) | 13.01*** (152) | |
| Unconventionality | .24 | 13.46*** (289) | 10.92*** (153) | |
| More desirable than cool | | | | |
| Personal competence | .36 | -1.86# (283) | -11.89*** (151) | |
| Attractiveness | .29 | -6.70*** (284) | -1.92# (150) | |
| Prosocial values | .36 | -6.33*** (252) | -15.04*** (149) | |
| Confidence | .38 | -2.58** (277) | -1.99* (149) | |
| Drive for success | .39 | -8.04*** (290) | -8.50*** (150) | |
| Friendliness | .36 | -6.72*** (276) | -7.25*** (151) | |
| Mixed | | | | |
| Trendiness | .39 | -6.07*** (275) | 2.03* (149) | |

Notes. An average of correlations between coolness ratings and social desirability ratings for each of the characteristics that are represented by the category in sample 1 (e.g., the Roughness value represents the average of the coolness and social desirability correlations of the 5 underlying characteristics). Positive scores represent coolness dominance. Some participants did not provide ratings for particular items, resulting in missing data. #p < .1, #p < .05, #p < .01, #p < .01.

istic's rating of coolness and of social desirability. The associations ranged in magnitude from weak (e.g., r = .14, p < .05 for thrill seeker) to strong (e.g., r = .58, p < .001 for charismatic). The average correlation was r = .35. The magnitudes of the correlations (see Table 2) suggest a consistent relation between judgments of coolness and social desirability across a broad range of evaluations, but the constructs of coolness and social desirability are not interchangeable.

Coolness Characteristics Versus Social Desirability Characteristics

For those in sample 1 completing both the coolness and the social-desirability rating questionnaires, we conducted paired-samples *t*-tests contrasting coolness and social desirability ratings for each category (see Table 2). The categories that were rated as significantly more cool than socially desirable were unconventionality, emotional control, irony, rebelliousness, roughness, thrill seeking, and hedonism. Confidence, prosocial values, attractiveness, personal competence, drive for success, trendiness, and friendliness were rated as significantly more socially desirable

than cool. Controlling for sex or ethnicity did not change the pattern of results, suggesting that perceptions of how to differentiate coolness from social desirability are widely shared.

For those in sample 2 completing the Coolness vs. Social Desirability Questionnaire, we conducted one-sample *t*-tests on the categories with the midpoint of the scale – 3.5 – as the test value (see Table 2). Ratings significantly above this test value were considered more cool; ratings significantly below this test value were considered more socially desirable. Thirteen of the categories were classified in general accord with the classification in sample 1 (i.e., in both samples, the same traits were considered more socially desirable than cool, or more cool than socially desirable). However, participants in sample 1 rated trendiness as more socially desirable whereas participants in sample 2 rated it as cooler.

Factor Analysis

In order to conduct an exploratory factor analysis, we combined the Coolness Rating Questionnaire data from both samples. Since parceling individual items into composites improves the stability of factor analysis results (e.g., Burdsal & Vaughn, 1974), we collapsed the individual adjectives into their respective categories. To produce unidimensional constructs with adequate internal consistency, we eliminated several items from certain categories. All 14 unidimensional categories were then entered into an exploratory factor analysis using principal axis factoring (PAF) and direct-oblimin rotation. The results identified only two factors with eigenvalues greater than one. A visual inspection of the scree plot also suggested a 2-factor solution. The factors combined to account for approximately 80% of the variance in coolness ratings. The two factors were largely orthogonal, r = -.09, ns, suggesting that the one conception of coolness is not empirically incompatible with the other. The first factor (eigenvalue prior to rotation = 8.91) explained 63.6% of the variance, whereas the second factor (eigenvalue = 2.27) explained 16.2% of the variance. Table 3 lists the pattern matrix of categories' loading on each factor. The items that loaded substantially (loadings greater than .3) on factor 1 were unconventionality, emotional expressiveness (as opposed to emotional control), thrill seeking, confidence, prosocial values, attractiveness, personal competence, drive for success, hedonism, trendiness, and friendliness. The items that loaded highly on factor 2 were emotional control, irony, rebelliousness, antisociality (as opposed to prosocial values), and roughness. We considered the underlying latent variable for factor 1 to be a current indicator for active, overtly expressive, status-conscious, desirability-oriented coolness and the underlying latent variable for factor 2 to be a more contrarian coolness, indifferent toward popular notions of what affords socially desirable status.

Table 3. Factor structure underlying coolness (Study 2, N = 508)

| Category (no. of characteristic | Factor loadings | | | |
|---------------------------------|------------------------------|---------------|----------|----------|
| | Characteristics ^a | $\alpha(r^b)$ | Factor 1 | Factor 2 |
| Rebelliousness (4) | rebellious, disciplined (R) | .52 (.22) | .06 | .78 |
| Irony (2) | ironic, sarcastic | .58 (.41) | .19 | .40 |
| Roughness (5) | aggressive, tough | .62 (.27) | 29 | .69 |
| Emotional control (5) | aloof, warm(R) | .72 (.33) | 67 | .52 |
| Thrill-seeking (4) | adventurous, cautious(R) | .83 (.52) | .91 | .28 |
| Unconventionality (4) | mysterious, conventional(R) | .78 (.55) | .87 | .21 |
| Hedonism (3) | fun, party animal | .83 (.63) | .92 | .09 |
| Prosocial values (10) | caring, selfish(R) | .95 (.63) | .76 | 46 |
| Drive for success (3) | ambitious, industrious | .81 (.59) | .86 | 19 |
| Friendliness (8) | friendly, disliked(R) | .96 (.73) | .95 | 17 |
| Personal competence (7) | charismatic, incompetent(R) | .95 (.73) | .95 | 10 |
| Attractiveness (4) | attractive, ugly(R) | .92 (.74) | .90 | .12 |
| Confidence (4) | self-assured, timid(R) | .83 (.55) | .92 | .04 |
| Trendiness (6) | current, old(R) | .92 (.63) | .91 | .09 |

Notes. "Examples of characteristics composing the unidimensional category. $^{\text{b}}$ Cronbach's α for scale and averaged interitem correlations among the items for the category (in brackets). (R) – Reversed scored. Factor loadings greater than .3 are in **bold**.

Discussion

The results of Study 2 indicate an extensive conceptual overlap between coolness and social desirability – and yet suggest how a clear and broadly agreed-upon distinction can be drawn between these two facets of coolness. All the correlations between characteristics' ratings for coolness and their ratings for social desirability were positive and significant. The categories of aggregated characteristics revealed the same pattern. However, the range of the correlations suggests that these constructs are not interchangeable.

In addition, participants drew a clear and broadly agreed-upon distinction between what is primarily cool and what is primarily socially desirable. There was extensive between-sample and between-instrument agreement on the degree to which participants conceived each of the 14 categories more as coolness or as social desirability. Such agreement was stable across sex and cultural background.

A factor analysis offered insight into the paradoxical nature of coolness. On the one hand, the vast majority of the variance in the categories' rating on coolness was explained by one factor. This factor was constructed out of 12 elements, eight of which consistently rated as more socially desirable than cool, and only three consistently rated as more cool than socially desirable. These latter three elements – thrill-seeking, unconventionality, and hedonism – may represent more specific desirability valuations of a youthful cohort, and may even be a product of the influence of coolness on perceptions of social desirability. Thus, it is plausible that being "unconventional," "risk-taking," and "hedonistic" have all garnered more social approval in the context of North American entrepreneurial and consumer culture than other more-cool-than-desirable elements like

irony, roughness, rebelliousness, and detachment. In addition to more socially-desirable-than-cool elements, then, factor 1 appears to capture a generally active and expressive orientation, one that embraces all things outward-looking and stimulating. This first factor may be understood as a representation of the contemporary overlap between coolness and social desirability as objects of striving for peer approval. We termed this factor *Cachet coolness*.

The second factor, which explained a more modest amount of the variance, was comprised of five elements each rated as more cool than socially desirable. The elements of factor 2 either did not load on factor 1 (e.g., irony) or loaded in the opposite direction (e.g., emotional control). Rebelliousness had the highest loading, and is arguably its most central theoretical element. This second factor better embodies the core construct identified as cool in the scholarly literature (Frank, 1997; Heath & Potter, 2004; Pountain & Robins, 2000). This factor presents coolness as more opaque, less active, and less engaged: coolness as detachment and camouflage. We termed this factor *Contrarian coolness*.

Factor analyses present salient dividing lines for disagreement, and there appear to be only two major dividing lines with regard to coolness in our sample: the division over whether or not socially desirable attributes are cool and the division over whether or not contrarian attributes are cool. Perceiving coolness as prodesirability or antidesirability is the dominant dividing line in coolness perceptions.

It is also important to note that the factors were uncorrelated. Many multifaceted personality constructs involve correlated factors because they are developed based on internal-consistency driven statistical techniques. Other theoretically-developed constructs may be composed of rela-

tively distinct independent components (Streiner, 2003). Such compound traits are composed of statistically uncorrelated constructs that span separate and complementary content domains of the construct (Ones, Viswesvaran, & Dilchert, 2005). The orthogonality of the two coolness factors suggests, oddly, that those who perceive coolness as being more about desirable (cachet) traits do not necessarily perceive it as being less about contrarianism as captured by the second factor.

This pattern may imply that Contrarian coolness is a kind of coolness that potentially transcends conventional norms of valuation: i.e., something "beyond desirable and undesirable." The pattern may also indicate a mild halo effect of the word "cool." Thus the historical association of contrarian traits with coolness, combined with the increasingly shared positive valence for the word "cool," may have resulted in these contrarian traits being judged more desirable than they might have been when cool was used as a term of approval primarily among the countercultural.

Finding two clear factors that are potentially uncorrelated also suggests that coolness valuation falls into four major quadrants³ – those who deem both Cachet and Contrarian coolness as cool (Quadrant 1), those who deem Cachet but not Contrarian coolness as cool (Quadrant 2), those who deem Contrarian but not Cachet coolness as cool (Quadrant 3), and those who deem neither as cool (Quadrant 4). In our sample, 31% of participants were in Quadrant 1 (with factor scores > 0 on both Cachet and Contrarian coolness), 36% were in Quadrant 2, 20% in Quadrant 3, and 13% in Quadrant 4.

Study 3

In the first two studies participants were asked to evaluate what was cool is in a rather explicit way, a task that many participants had likely never previously undertaken. In contrast, it should be more common for people to judge others intuitively as cool or not, without explicitly knowing why. Study 3 examined whether the criteria driving these intuitive judgments reflect coolness as active, outward-looking, expressive, and status-bolstering (Cachet coolness) or coolness as withdrawn, rebellious, antisocial, and opaque (Contrarian coolness).

Method

Participants

A group of 410 participants took part in Study 3. Their names and contact information were given by their peers who took part in different studies in response to the following request:

On the following page we ask you to provide the name, relationship to you, and contact information of people that you think can fairly (or somewhat fairly) evaluate you. We will send them a request to provide us with a short evaluation of your personality. Once we receive the information we will no longer associate any of your answers with your identifying information. Any of the materials you have provided us will not be shared with these people and your information will be completely confidential.

An experimenter contacted these candidates by e-mail requesting their evaluations of the person who provided us with their name. Those who agreed to participate sent their responses by e-mail for the chance to win \$100. The response rate was 53%.

Procedure

Participants provided us with ratings of a friend on 15 attributes. Each participant rated his or her friend on coolness and on each of the 14 categories identified in Study 2 (e.g., "friendly" to represent friendliness, "ambitious" to represent drive for success). Two ratings for each descriptor were provided on 11-point scales (1 = not at all, 6 = average, 11 = extremely) as a response to questions assessing their personal evaluations of their friends (e.g., How adventurous do you consider *name of the friend* to be?) and participants' perceptions of how others perceive their friends (e.g., How rebellious do you think people in general consider *name of the friend* to be?). Table 4 presents the descriptors participants used to evaluate their friends and the categories that each of these descriptors was meant to represent.

Table 4. Categories, adjectives, and factor structure of friends' coolness ratings (Study 3, N = 410)

| Category | Adjective | Factor loadings | |
|---------------------|--------------|-----------------|----------|
| | | Factor 1 | Factor 2 |
| Rebelliousness | Rebellious | 08 | .71 |
| Irony | Ironic | .00 | .39 |
| Roughness | Tough | .04 | .58 |
| Emotional control | Detached | 39 | .18 |
| Thrill-seeking | Adventurous | .24 | .62 |
| Unconventionality | Conventional | .19 | 01 |
| Hedonism | Party animal | .13 | .55 |
| Prosocial values | Caring | .71 | .15 |
| Drive for success | Ambitious | .43 | .27 |
| Friendliness | Friendly | .70 | 17 |
| Personal competence | Charismatic | .57 | .28 |
| Attractiveness | Attractive | .62 | .16 |
| Confidence | Confident | .38 | .39 |
| Trendiness | Trendy | .49 | .18 |

Note. Factor loadings greater than .3 are in bold.

³ We wish to thank an anonymous reviewer as well as one of our research assistants, Christina Maharaj, for this observation.

Results

The correlations between the items that represented personal and the general ratings were very high for each descriptor (rs = .74-93). To increase the reliability of the measure, we averaged the personal and general ratings, creating a composite rating for each descriptor.

Factor Analysis

The 14 composite descriptors were entered into an exploratory factor analysis using PAF and direct-oblimin rotation with direction to extract two factors. The results of the factor analysis are reported in Table 4. The factors combined to account for approximately 43% of the variance. The two factors were moderately correlated, r = .29, p < .001. The first factor (eigenvalue = 3.99) explained about 29% of the variance, whereas the second factor (eigenvalue = 1.95) explained about 14% of the variance⁴. Table 4 lists the descriptors' loadings (pattern matrix) on each factor. The descriptors that loaded substantially on factor 1 were friendly, ambitious, charismatic, confident, attractive, personally competent, and trendy. The descriptors that loaded substantially on factor 2 were ironic, rebellious, tough, party animal, confident, and adventurous. The descriptor "conventional" did not load substantially on either factor, and "detached" loaded negatively on the first factor. Regression-based factor scores were saved for further analysis.

Regression Analysis

To evaluate the relationships between coolness and the extracted factors, the factors' scores were entered as predictors in a hierarchical regression analysis predicting the composite coolness evaluation. In step one, the first factor predicted 37% of the variance in coolness ($R^2 = .374$, F(1, 408) = 244.01, p < .001). Adding the second factor in the second step significantly added to the variance explained ($\Delta R^2 = .045$, F(1, 407) = 31.67, p < .001). Both factors had significant effects on coolness evaluations with factor 1 having a stronger relationship ($\beta = .55$, p < .001) than factor 2 ($\beta = .22$, p < .001).

Discussion

Study 3 adds to Studies 1 and 2 both by measuring the coolness evaluations concretely rather than abstractly and by demonstrating the independent associations of each factor with coolness valuations. Similar to the previous studies, the findings of Study 3 suggest that ratings of coolness

are primarily about peer-relevant social desirability. Under factor analysis, the two previously-identified factors largely emerged as they did in Study 2, with friendliness being a hallmark of the first factor (Cachet coolness) and caring, attractiveness, personal competence, and drive for success also loading substantially. The second factor (Contrarian coolness) was (again) dominated by rebelliousness as well as irony and toughness. The factor loadings found in this study were quite similar to those in Study 2. The pattern regarding emotionality was partially retained with the cachet factor showing a positive relation with emotional expressiveness whereas the contrarian factor showed a positive, albeit small, relationship with muted emotions.

The main cross-study discrepancies in factor loadings involve the characteristics thrill-seeking and hedonistic, which loaded on the contrarian factor in this study but not in Study 2. Nonetheless, these particular results are consistent with the *t*-test results in Study 2, in which thrill-seeking and hedonism were both rated as more cool than desirable. Assuming that hedonism and thrill-seeking are desirable among the contemporary young, having these elements on factor 2 rather than factor 1 may contribute to the positive, rather than null, correlation between the factors in this sample (in other words, had these elements loaded on factor 1 instead, the factors might be less positively correlated).

We noted earlier that hedonism, thrill-seeking, and unconventionality - though rated as "more cool than socially desirable" – may have loaded on the first factor in Study 2 because their associations with success as either entrepreneurs or consumers in North American culture have increased their perceived cachet. When considering the coolness of these elements in the abstract, we must admit that this perceived cachet may have superseded intuitions that these elements are more-cool-than-desirable (and so they loaded on the more-desirable-than-cool factor - Cachet coolness, factor 1). Perhaps determining the relevance of hedonism and thrill-seeking to real-life peers may have more effectively activated the distinguishing intuitions that contributed to judgments (in Study 2) that these traits are more cool-than-desirable – thus these elements loaded on the more-cool-than-desirable (contrarian) factor, factor 2. Yet insofar as these elements were still perceived to have some cachet, their loading on factor 2 may have contributed to the positive correlation among the factors in this study.

The factors may also be correlated because any halo effect of the word "cool" may be particularly powerful when rating the coolness of people. That is to the extent judgments of cool are determined at all by contrarian features – once that judgment is made – it may influence judgments about other traits that are perceived as positive (i.e., most of the cachet traits): If you perceive a peer as rebellious, ironic, rough, etc., then you perceive him or her as cool (by the old-time definition); and if you perceive him or her as cool (a positively valenced word), then you (by the halo

In a different analysis that did not restrict the number of factors to extract, three factors were extracted. The third factor (eigenvalue = 1.35) explained less than 10% of the variance and had no interpretive meaning providing support for our methodological restriction.

effect) perceive him or her as friendly, competent, generous, etc. Thus, the halo effect might win out over the semantic tension between cachet and contrarian traits when judging the coolness of actual people. These explanations are necessarily speculative, however.

General Discussion

All three studies converge to suggest that the popular understanding of coolness in our samples of young adults is driven (primarily) both by perceptions of peer-relevant social desirability and (secondarily) by the darker history of the word cool. The rebellious nature of coolness was clearly borne out as an aspect of the construct that is relatively independent from conventionally desirable characteristics such as attractiveness and friendliness.

In Study 1, participants were more likely to mention traits that were generically desirable rather than traits identified as markers of cool in the scholarly literature, though mentions of either kind of trait were much more common than mentions of traits in direct tension with Cachet coolness (e.g., no one mentioned "ugly," "stupid," or "lazy") or in direct tension with Contrarian coolness (e.g., no one mentioned "obedient," "earnest," or "obsessive").

The results of Study 2 both confirmed and qualified these findings. For every trait examined, its coolness rating correlated with its social desirability rating, but the magnitude of these correlations did not suggest an interchangeability of the constructs, and two methods of contrasting coolness with social desirability showed a largely consistent pattern of evaluations with regard to what was more cool than socially desirable and what was more socially desirable than cool. A factor analysis also indicated that, although the predominant factor for judging coolness was based on socially desirable traits, the darker, more contrarian features were still relevant to perceptions of coolness. Study 3 corroborated these results by finding that perceptions of coolness in other people are driven by both cachet and contrarian factors, with an emphasis on the former.

These findings reflect the predominant popular understanding of cool intrinsic to this particular population of young adults. One may interpret this evidence as corroborating both dictionary definitions of the word (as little more than popular slang for "good"), and yet not fully contradicting previous theoretical accounts for this construct, which have mostly focused on the contrarian features of coolness (e.g., Danesi, 1994; Majors & Mancini Billson, 1992; Pountain & Robins, 2000). Those who call a person "cool" appear to be conveying discernible information – which is perhaps expected since meaningless or infinitely generic words do not become embedded in popular language (Allport, 1937; Goldberg, 1993).

The two underlying factors that our research has identified coexist under a single coolness umbrella. Both factors figure prominently in the history of the word cool, but the

rebellious and detached-from-the-mainstream style of coolness has arguably had the longer history with its origin in the early 20th century, predominantly African American, jazz movement. Our finding that contrarian coolness is less evident in today's popular conceptualization of coolness (among our mostly educated, young, Canadian, ethnically white and Asian, predominantly female samples) does not necessarily mean that its history of social influence is coming to an end. To the extent our samples represent a widespread zeitgeist, our results likely mean that popularizing the word cool – for decades a term of exclusively or primarily countercultural approval – has gradually changed the perception of coolness.

Insofar as the descriptor "cool" has gradually come to be used over time in the mainstream in a more positive sense, traits that are generically positive may have become more likely to be described as cool – and in some cases (as in our studies) the word "cool" may even be more readily associated with generically positive traits than with traits signifying rebellion, irony, roughness, etc. To the extent our results are population-specific, it is plausible that Contrarian traits might be considered in other populations more emblematic of coolness than Cachet traits (and in these other samples, Contrarian traits may also explain more of the variance than Cachet traits). Indeed, examining cultural and generational variation in preferences for the Contrarian vs. Cachet conception of coolness is a fertile subject of investigation for future studies.

Our distinction between Cachet and Contrarian coolness may shed light on a multitude of other social and psychological issues as well. It has been hypothesized that coolness posturing serves a self-defensive function (Connor, 1995; Majors & Mancini Billson, 1992). It is a plausible hypothesis that Contrarian coolness elements may shield a self-perceived outsider's sense of self-worth by creating cognitive (rebelliousness), emotional (detachment), and behavioral (roughness) defenses against the judgments of mainstream culture. To the extent that these defenses become normative in some subcultures, one would expect that its members would score higher on measures of Contrarian coolness. Moreover, these norms could influence a host of actual behaviors (Ajzen, 1991). Adopting certain attitudes or theories about the world has been shown to be an effective buffer for those who might otherwise be adversely affected by viewing themselves as a minority or a member of a lower-status group (e.g., Dar-Nimrod & Heine, 2006, 2011).

Our finding that Cachet and Contrarian coolness are perceived as potentially orthogonal or even moderately positively correlated is consistent with Frank's (1997) suggestion that coolness as a counterculture force may no longer reflect an actually rebellious value system, but rather a kind of rebellious-looking conformity to current social forces, particularly consumerism. In addition to consumerism, the cool pose may confer other disadvantages: susceptibility to peer pressure (Cachet), smoking (Contrarian), drug use (Contrarian), and sex before sexual understanding (Cachet

and Contrarian). However, the cool pose may also confer advantages such as prosociality (Cachet) and self-concept protection (Contrarian). In addition, much of the promise and danger of coolness lies in its association with activities, artifacts, and symbols (e.g., extreme sports, body modification). These are fertile areas for future research.

To our knowledge, the present research is the first attempt to quantitatively investigate the concept of coolness, and as such several limitations deserve comment. First, we did not collect behavioral data. Investigation of how perceptions of coolness affect behavior is an important next step. Second, the relationships we uncovered between specific attributes and the coolness construct have the usual ambiguities of correlations⁵. These attributes may represent the defining elements of coolness (in our sample), but they may also represent antecedents of the construct or even the consequence of being a cool person. We suggest that, similar to other constructs that do not reflect a cohesive set of attributes (Streiner, 2003), coolness can be reached in multiple ways, and as such it may not have necessary or sufficient defining elements, i.e., those who are very attractive may need less of the other elements (e.g., drive for success, friendliness) to be considered cool by the cachet criteria; rebellious persons may need less irony to be considered cool by the contrarian criteria. Nevertheless, this is a speculative suggestion and more investigation is needed.

Third, though our diverse methods of measurement yielded similar results, most of the data are restricted to a particular age cohort and geographical location. The extent to which our findings generalize to different populations, especially marginalized cultures and subcultures, remains to be explored. Though different measurement outcomes may be obtained in different samples, the quantitative tools employed here might still work as effective measures in a diverse set of populations, and could in fact be used to examine cultural, gender, and generational differences.

Additional systematic investigation of coolness as a psychological construct may also provide practical insight into the nature of diverse attitudes and behaviors that have been investigated extensively but rarely with coolness in mind: the nature of sex differences (e.g., does any sex difference found for Contrarian coolness reflect presentational or substantive variation?), group dynamics (e.g., can we prime Cachet coolness to facilitate positive group dynamics?), individualism vs. collectivism (e.g., does coolness have a role in increasing individualist orientation?), love and sex (e.g., do the coolness facets increase attraction controlling for known relevant variables such as similarity, familiarity, and physical appeal?), school performance (e.g., does Contrarian coolness hinder academic efforts?), health behaviors and utilization of medical services (e.g., do presentational issues that are spun from the contrarian facet's relationship with invulnerability affect early detection of physical ailments? Or the likelihood of engaging in risky, health-damSimilar to research on personality-relevant individual differences in music preferences (Rentfrow & Gosling, 2003), we argue that the study of individual differences can be enriched by a focus on novel constructs that play a central role in people's lives. In this spirit our research findings provide a contemporary understanding of the cool personality in a manner that identifies new directions for basic and applied research endeavors.

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aging behaviors?), and prejudice (e.g., can priming the coolness facets be used to mitigate prejudice?) – to name but a few. A coolness-minded perspective may also offer insights into important matters that have received less attention, such as individual and group-based esthetic differences, cultural production, and innovation.

⁵ We wish to thank an anonymous reviewer for this observation.

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