

Brand Coolness: Web Appendix

Index

- A: Definitions of Coolness, p. 2
- B: Details of Qualitative Studies, p. 9
- C: Details of Survey Pretest Studies 1-4, p. 15
- D: Brand Manipulations and Measurement Items in Studies 5-8, p. 22
- E. Testing for Equivalence Across Cool and Not-Cool Brand Samples, p. 28
- F. Testing for Discriminant Validity, p. 31
- G. Testing for Mediation, p. 34
- H. Variance-Explained Model Estimates, p. 37
- I. Marker Variable Tests for Methods Factor Bias, p. 39
- J. Details of Study 8 (Reddit Apparel Streetwear Study), p. 41
- K. Additional References, p. 43

WEB APPENDIX A: DEFINITIONS OF COOLNESS

Table A-1. Table A-1 provides definitions of coolness from 59 academic papers and books. To keep the length of the list (relatively) reasonable, the table does not include non-academic definitions from popular press articles, websites, and dictionaries. When possible, we quote the original sources directly. In many cases, it was unclear if the scholars were defining or merely describing some aspect of coolness. In such cases, we included the statement in this table to err on the side of being inclusive. The additional references cited here that are not already in the main paper are listed at the end of these web appendices.

Source	Definition(s)
Thompson 1973	<p>(1) "Coolness in these senses is therefore the purifying means by which worlds are taken out of contingency and raised to the level of aspiration. Put another way, coolness has to do with <i>transcendental balance</i>, as in Manding divination, where good outcomes are signaled by one kola half up, one down, and this is called 'cool.'" (p. 40)</p> <p>(2) "Usually it implies merely a high degree of self-control, though it may also indicate aloofness." (p. 40)</p>
Majors and Billson 1992	<p>(3) "A complex system of coping mechanisms, a technique for survival in black America." (p. 1)</p> <p>(4) "Coolness means poise under pressure and the ability to maintain detachment, even during tense encounters." (p. 2)</p>
Stearns 1994	<p>(5) "The word has come to mean many things, but it always suggests approval." (p. 1)</p> <p>(6) "Conveying an air of disengagement or nonchalance" (p. 1)</p>
Danesi 1994	<p>(7) "Coolness entails a set of specific behavioral characteristics that vary in detail from generation to generation, from clique to clique, but which retain a common essence... First and foremost, coolness implies a deliberately slow and lackadaisical form of bodily locomotion, accompanied by a nonchalant and unflappable countenance." (p. 38)</p> <p>(8) "Coolness is a perceived state to which many (if not most) teens now aspire, even if its specific behavioral forms can vary substantially." (p. 40)</p>
Connor 1995	<p>(9) "Cool is an unexpected attitude catching society off-guard and conquering defiantly with its own inimitable style" (p. xiii)</p> <p>(10) "It is a lifestyle. It has little to do with the hippest clothes or the latest fad. Cool became the new rules and the new culture for those Black people who rejected white American culture and white America's notion of how people should behave. It became the new definition of manhood and maturity in a life that is devoid of certain tools and abundant in others." (p. 2)</p> <p>(11) "Cool, as we recognize it today, developed into a silent code of behavior, a lifestyle, a barometer, a measuring stick, a reality check, a method for determining when a Black boy has achieved 'manhood.'" (p. 10)</p> <p>(12) "Cool is an attitude, and that attitude is self-confidence." (p. 30)</p>

Porschardt 1999	(13) “the attempt to counter the ice ages of our existence with affirmative strategies.” (p. 10)
Lasn 1999	(14) a “heavily manipulative corporate ethos” (p. xiii-xiv) (15) “‘Cool’ used to mean unique, spontaneous, compelling. The coolest kid was the one everyone wanted to be like but no one quite could, because her individuality was utterly distinct. Then “cool” changed. Marketers got hold of it and reversed its meaning. Now you’re cool if you are <i>not</i> unique – if you have the look and feel that bear the unmistakable stamp of America™.” (p. 113)
Pountain & Robins 2000	(16) “Cool is an oppositional attitude adopted by individuals or small groups to express defiance of authority” (p. 19) (17) “Cool is a rebellious attitude, an expression of a belief that the mainstream mores of society have no legitimacy and do not apply to you” (p. 23)
O’Donnell and Wardlow 2000	(18) “Coolness is a set of shared meanings (e.g. language, self-presentation, artistic expression, values, attitudes) within a peer group which signify group affiliation.” (p. 13)
MacAdams 2001	(19) “‘Cool’ meant not only approval, but kinship.” (p. 14) (20) “At its core, cool is about defiance.” (p. 20) (6) Same as Stearns 1994 (9) Same as Connor 1995
Nancarrow et al. 2003	(21) “Cool was essentially an attitude adopted by black musicians as a defense against the prejudice they encountered and a form of detachment from their difficult and often insecure working conditions.” (p. 312) (22) “We would define [cool] partly as an attitude—laid-back, narcissistic, hedonistic—but also as a form of cultural capital that increasingly consists of insider knowledge about commodities and consumption practices as yet unavailable to the mainstream.” (p. 315)
Southgate 2003	(23) “Cool is a body of practiced knowledge.” (p. 459)
Heath and Potter 2004	(24) “It is best to think of cool as the central status hierarchy in contemporary urban society. And like traditional forms of status such as class, cool is an intrinsically positional good... cool is ultimately a form of distinction.” (p. 191) (25) “To be cool or hip, [in the view of the partisans of cool] is to engage in a set of practices and to adopt a set of attitudes that are designed to liberate the individual from the shackles of mass society” (p. 192)
hooks 2004	(26) “Black male cool was defined by the ability to withstand the heat and remain centered. It was defined by black male willingness to confront reality, to face the truth, and bear it not by adopting a false pose of cool while feeding on fantasy; not by black male denial or by assuming a “poor me” victim identity. It was defined by individual black males daring to self-define rather than be defined by others.” (p. 138)
Liu 2004	(27) “The techno-informatic vanishing point of contemporary aesthetics, psychology, morality, politics, morality, spirituality, and everything. No more beauty, sublimity, tragedy, grace, or evil: only cool or not cool.” (p. 4) “The nascent, everyday aesthetics of knowledge work.” (p. 8)

Moore 2004	<p>(28) “A subdued or controlled emotional state” (p. 70)</p> <p>(29) “The slang term cool that emerged in the 1930s elaborated on the basic metaphor of subdued emotion adding in particular the qualities of knowingness, detachment, and control. Knowingness, as a core quality of modern cool, refers to something more specific than mere “knowledge.” Knowingness implies a kind of insider knowledge, access to information that the speaker is in some sense privileged to have. It is the qualities of knowingness, detachment, and control along with the implication of rebelliousness that make up the original core referent of the modern cool concept and that distinguish modern cool from its less specific predecessors. (p. 70-71)</p> <p>(30) “cool came to refer to people and things distinctly separate from adult-approved conventions, particularly things and people that were prominent in adolescent prestige hierarchies.” (p. 81)</p>
Milner 2006/2013	<p>(31) “Coolness is a variance of asceticism. Asceticism is a means of seeking power by being indifferent to the usual worldly sanctions... What teenage coolness and these other forms of asceticism have in common, however, is resistance through the cultivation of an alternative lifestyle that advocates indifference to what is valued in the existing dominant culture.” (p. 60)</p>
Levy 2006	<p>(32) “An all-purpose descriptor for anything that tips the scale on the positive side.” (p. 112).</p>
Belk 2006	<p>(33) “A person who is admired because she, or more often he, exhibits a nonchalant control of emotions, a rebellious trickster demeanor, an ironic detachment from the regard of others, and a ‘cool’ style of talking, walking, gesturing, and grooming.” (p. 7)</p>
Nancarrow and Nancarrow 2007	<p>(34) “Cool is not something you can set out to acquire; it is something that is acknowledged in you by others. It involves originality, self-confidence and must be apparently effortless. It is often transgressive and anti-establishment. It is certainly narcissistic. Some of its more universal signifiers are likely to include a refusal to conform, artistic involvement, a sense of detachment and a hint (or more) of the illicit. It is always about not being seen to try too hard.” (p. 135)</p> <p>(35) “Cool by its very nature is not caring what anyone else thinks.” (p. 135)</p>
Tapp and Bird 2008	<p>(36) An “elusive, exclusive quality that makes behaviors and objects so hip, desirable and symbolic of ‘being in the know.’” (p. 3?)</p>
Hebdige and Potter 2008	<p>(37) “Cool (or hip, alternative, edgy) here becomes the universal stance of individualism, with the hipster as the resolute nonconformist refusing to bend before the homogenizing forces of mass society.” (p. 528)</p>
Gloor 2009	<p>(38) A “property combined of four characteristics,” including: (a) “cool things are <i>fresh and new</i>,” (b) cool things <i>make us part of a community</i>,” (c) “cool things are <i>fun</i>,” and (d) “cool things <i>give meaning to our life</i>.” (p. 1-2; italics in original)</p>
Rahman, Harjani, and Thoomban 2009	<p>(33) Same as Belk et al. 2006</p>

Gioia 2009	(39) “A verbal tic expressing approval of any sort” (p. 1) (40) “Cool was defined by its reliance on image and irony, by its artifice and playful fluidity. It was marked, above all, by an outward focus on trends and fashions.” (p. 4)
Belk et al. 2010	(41) “Cool is a particular impression-related verbalized and embodied performance.” (42) “Cool is an attitude of mastery and not merely an appearance”
Botz-Bornstein 2010	(43) “Let me say that <i>cool resists linear structures</i> . Thus a straightforward, linear search for power is not cool. Constant loss of power is not cool either. Winning is cool; but being ready to do anything to win is not. Both moralists and totally immoral people are uncool, while people who maintain moral standards in straightforwardly immoral environments are most likely to be cool. A CEO is not cool, unless he is a reasonable risk-taker and refrains from pursuing success in a predictable fashion. Coolness is a nonconformist balance that manages to square circles and to personify paradoxes.” (italics in original) (44) “Coolness is a matter of balance; or more precisely, of negotiating a way to survive in a paradoxical condition. It’s about maintaining control while never looking as though you might have lost control.”
SriramachandraMurthy and Hodis 2010	(45) “a gestalt brand image composed of an amalgamization of perceived qualities, particularly authenticity, uniqueness, innovativeness, excitement, and congruity with self-image.” (p. 1)
Farnsworth et al. 2011	(46) “Uniqueness, being different from the crowd, aesthetics, and usefulness are at the core of coolness.” (p. 3)
Read et al. 2011	(47) Defined cool as having six essential categories: rebellious, anti-social, retro, authentic, monetarily expensive, and innovative. (p. 1569)
McCrickard, Barksdale, and Doswell 2012	(47) Same as Read et al. 2011
McGuigan 2012	(48) “coolness has become a personal stance, mode of deportment and argot, associated with dignity under pressure in oppressive circumstances.” (p. 431)
Runyan, Noh, and Mosier 2012	(49) “We define cool as an attitude or belief about a product (in this case, clothing), which is either hedonic or utilitarian in nature.” (p. 323) (50) “Cool (and coolness) is a set of shared meanings inside a peer cohort, signifying group affiliation” (p. 324)
Culén and Gasparini 2012	(51) “beautiful, divine, exquisite, fashionable, fun, glorious, hip, hunky-dory, trendy, neat, nifty, peachy, popular, sensational, stylish, sub-zero, swell, well-designed.” (p. 117)
Dar Nimrod et al. 2012	(52) The authors define coolness as having two, orthogonal components: Cachet coolness: “a representation of the contemporary overlap between coolness and social desirability as objects of striving for peer approval.” (p. 180) Contrarian coolness: “coolness as detachment and camouflage.” (p. 180)

Gerber and Geiman 2012	(53) A shared or consensus view held by a group about what is or is not cool: “coolness does not exist in an object but coolness may be a characteristic of a network.” (p. 107)
Rahman 2013	(33) Same as Belk 2006 (54) “Coolness can thus also mean being distinctive.” (p. 622)
Cowan, Avramides, and Beale 2013	(55) “‘Cool’ is a word that is universally used to mean ‘fun’, ‘neat’, ‘great’, ‘hot’, ‘fashionable’ or ‘excellent’, and to denote agreement (“that’s cool”), rendering much of its use somewhat vague. ‘Cool’ is also used to mean “the quality of being fashionably attractive or impressive” (Oxford English Dictionary). Attempts to define cool academically have described it as a set of meanings shared by a peer group that is used to highlight group membership (O’Donnell & Wardlow 2000) and as a social tool to demonstrate autonomy from mainstream society (Warren 2010).”
Wooten and Mourey 2013	(4) Same as Majors and Billson 1992 (7) Same as Danesi 1994 (41) Same as Belk et al. 2010 (56) “In sum, coolness involves indifference toward others (Danesi 1994) and validation by others (Belk et al. 2010), sometimes the same others toward whom one supposedly is indifferent. It has been characterized as an outward display of an inner quality, but mainstream consumers tend to pursue the outward symbols more actively than the inner quality they supposedly convey (Belk et al. 2010). Coolness should be devoid of emotional expression (Danesi 1994), but often is infused with stylistic expression (Majors and Billson 1992). It provokes imitation, but resists duplication... It is rooted in marginalized groups and youth countercultures, but has been diluted by mainstream values. (p. 171)
Warren and Campbell 2014	(57) “a subjective and dynamic, socially constructed positive trait attributed to cultural objects (people, brands, products, trends, etc.) inferred to be appropriately autonomous.” (p. 544)
Sundar, Tamul, and Wu 2014	(58) “‘Cool’ is generally conceptualized as a positive, desirable attribute.” (p. 170) (59) “a positive and desirable quality used to describe innovations, be they ideas, technologies or products.” (p. 170) They conceptualize coolness in technological products as a reflective construct with three sub-components: subculture, attractiveness, and originality.
Zimmermann and Grebe 2014	Defining senior coolness: (60) “a particular kind of composure and poise in the face of old age, namely, the “thermodynamic” ability, as it were, to keep one’s cool. And that means not allowing oneself be thrown off one’s stride by the miseries of old age — maintaining perspective, viewing things from a distance and maintaining a distance, not least by means of humor and irony.” (p. 25) (61) “‘Senior coolness’ can be thought of as a habitus or as the art of aging that is relevant at both a subjective (personal) level as well as an objective (societal) level.” (p. 25)

Im, Bhat, and Lee 2015	(62) “the degree to which a new product has trendy, hip, appealing, fascinating and attractive features.” (p. 166)
Jamison, Wilson, and Ryan 2015	(63) “Coolness indicates the embodiment of some combination of attributes that wins approval or earns the attention of others.” (p. 384)
Kim, Shin, and Park 2015	(59/60) Same as Sundar et al. 2014
Kohlenberger 2015	(64) “uses of cool can be grouped into the following broad categories: cool is an aesthetic category; a personal attitude, pose, or strategy, tightly linked to a very specific (yet potentially changing) set of behavioral standards and character traits; a dominant cultural discourse of postmodern information society, illustrative of a consumer ethos hinged on technology, digital expression, and pseudo-rebellious attitude; finally, a virtually empty signifier, expressing admiration, consent, or agreement, applicable in almost any social interaction.” (p. 34) (65) “exuding an inescapable aura of unknowability and obscurity, which is, for better or worse, extended to its bearer: A cool character is always already surrounded by an air of mystery and secrecy, convincingly conveying the impression of possessing some deeper knowledge not disclosed to the ordinary onlooker.” (p. 35) (66) “While cool, in its most basic sense, may be defined as the art of indifference, one must invest quite a considerable amount of thought, time, and money in order to accomplish this high degree of seeming complacency” (p. 36) (16) same as Pountain and Robins (p. 42)
Bruun et al. 2016	(67) “We have identified three core principles of coolness, which shaped our experimental design: (1) Coolness consists of inner and outer cool, (2) Coolness is recognised immediately and (3) Coolness is grounded in people’s communities... Inner cool is about someone’s or something’s personality or character. Outer cool is about how something presents itself through a certain style in physical appearance.” (p. 235)
Mohiuddin et al. 2016	(68) “hip, fashionable, attractive, desirable, or excellent.” (p. 121) (69) coolness includes seven dimensions: “deviating from the norm, self-expressive, indicative of maturity, subversive, prosocial, evasive, and attractive.” (p. 132)
Keifer and Wang 2016	(63) Same as Jamison et al. 2015
Raptis et al. 2017	(59/60) Same as Sundar et al. 2014 (67) Same as Bruun et al. 2016
Anik, Miles, and Hauser 2017	(71) Citing Warren and Campbell (2014), they define cool as being (a) “socially constructed,” (b) “subjective and dynamic,” (c) “a positive quality,” and (d) requiring “autonomy, authenticity, and attitude.” (p. 1-2)
Shin and Biocca 2018	(72) Citing Kim, Shin, and Park 2015, they define cool as, “Being autonomous in an appropriate way.” (p. 883)

Dar Nimrod et al. 2018	(52) Same as Dar Nimrod et al. 2012
Warren, Pezzuti, and Koley 2018	(57) Same as Warren and Campbell 2014
Simpson and Pullen 2018	(70) “a particular, admired set of attitudes, practices and displays (Botz-Bornstein 2010).” (p. 170)
Liu and Matilla 2018	(73) “a positive and desirable quality associated with being innovative, original, or unique.” (p. 2)
Warren and Reimann 2019	(57) Same as Warren and Campbell 2014
Duggal and Verma 2019	(18) Same as O’Donnell and Wardlow 2000 (52) Same as Dar Nimrod et al. 2012
Zouaoui and Smaoui 2019	(24) Same as Heath and Potter 2004 (53) Same as Gerber and Gaiman 2012 (57) Same as Warren and Campbell 2014

WEB APPENDIX B: DETAILS OF QUALITATIVE STUDIES

The three qualitative studies included a set of four focus groups, a set of 30 in-depth interviews, and one set of 75 written essays. Prior to these studies, we conducted an extensive literature review to identify characteristics and adjectives associated with cool brands. These studies were then conducted to explore the cool brand characteristics found in the literature and to identify additional characteristics and adjectives assigned by respondents to cool brands that were not apparent in the literature review (Hudson and Ozanne 1988).

Study 1: Focus Groups

First, four focus groups were conducted in the U.K., Slovakia, and Portugal. The first three focus groups used university students studying design, sports, marketing, management, and tourism, and also included some students from the United States and Brazil in addition to native students. The fourth focus group took place in Portugal with non-students of different professions such as engineering, history, economics, and marketing. The average number of participants in each group was eight (Zeller 1993). All participation was voluntary; there were no financial incentives.

Before beginning each session, the participants were informed about the purpose and the procedure of the study, gave permission to record, and were assured anonymity. The moderator then attempted to engage all participants (Silverman 2004) using neutral questions (Morgan 1996) such as these: What characteristics do you associate with cool and not-cool brands? What makes a brand cool? Is a brand cooler when it is not mainstream? Do you buy cool brands? Why? What are some examples of cool brands? Are these cool for all age-groups? For different social groups? Are there different types of cool brands? The data were transcribed from the recording, preserving the words spoken, and then analyzed (see Figure B-1 below). The focus

groups lasted approximately 60 minutes and were conducted in either English (U.K. and Slovakia) or Portuguese (Portugal). Although the Portuguese use slang words like “fixe” and “porreiro” expressing a very similar idea as the word “cool,” they also regularly use the English word “cool.” Moreover, respondents tended to use the word “cool” in a similar way regardless of their country of origin.

Study 2: Depth Interviews

While focus groups have some advantages over one-on-one interviews (Silverman 2004), individual in-depth interviews can often provide deeper information (Fern 1982; Gubrium and Holstein 2001), and are often used in qualitative research to supplement focus groups (Morgan 1996). Consequently, the second qualitative phase consisted of 30 depth interviews which were conducted in Portugal with 8 students studying fashion design and 8 general design students, from 3 different universities; 8 non-student consumers from the city centers of Porto and Lisbon; 4 marketing specialists; and 2 brand managers of two different brands referred to as cool by the earlier focus groups.

The interviews followed a methodological procedure similar to that outlined by McCracken (1988; see also Gubrium and Holstein 2001). Informants were asked a series of grand tour questions, including “What are the essential characteristics that you associate with cool brands?” and “What distinguishes a cool brand from an uncool brand?” We followed these grand tour questions with prompts, which frequently emerged within the dialogue and directed the discussion. The discussion guide also delved into some personal consequences of owning a cool brand, including associated feelings, loyalty and commitment, and effect on word of mouth. The interviews were conducted in Portuguese and lasted approximately 60 minutes each. They were recorded and transcribed in Portuguese and subsequently summarized in English.

Study 3: Essay Writing

In our third qualitative study, 75 students at a university in the United States wrote an essay as part of an extra credit assignment for a marketing class. The instructions were as follows: “(a) identify a brand that you consider cool, (b) explain why you consider it cool, (c) identify a brand that you like, but do not consider cool, and (d) explain why you don’t consider it cool.” All essays were written in English and ranged from one to two pages in length.

Discarded Themes in the Qualitative Data

In addition to the themes that we identified as prototypical characteristics of cool brands, our qualitative data suggested two additional characteristics that were not supported in subsequent quantitative studies: *social responsibility* and *scarcity*.

Several European respondents in the focus groups and depth interviews thought that cool brands are environmentally conscious, friendly, charitable, or, more generally, socially responsible. The theme of social responsibility did not, however, emerge in the essays written by American respondents. Moreover, several papers in the literature suggest that coolness is more closely associated with socially irresponsibly behaviors, including smoking, drug use, and even violence (Connor 1995; Danesi 1994; Leland 2004). Social responsibility might make brands cool by increasing the extent that consumers desire the brand or by adding to the brand’s symbolic value. However, because of the weak and uneven link between social responsibility and perceived coolness in both our qualitative studies and initial survey studies (see Web Appendix C), we decided to not include social responsibility as a stand-alone characteristic of cool brands.

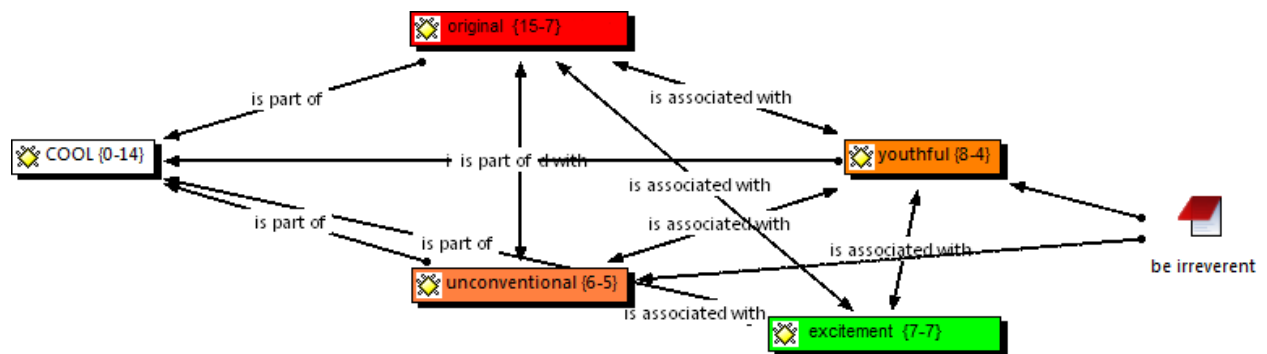
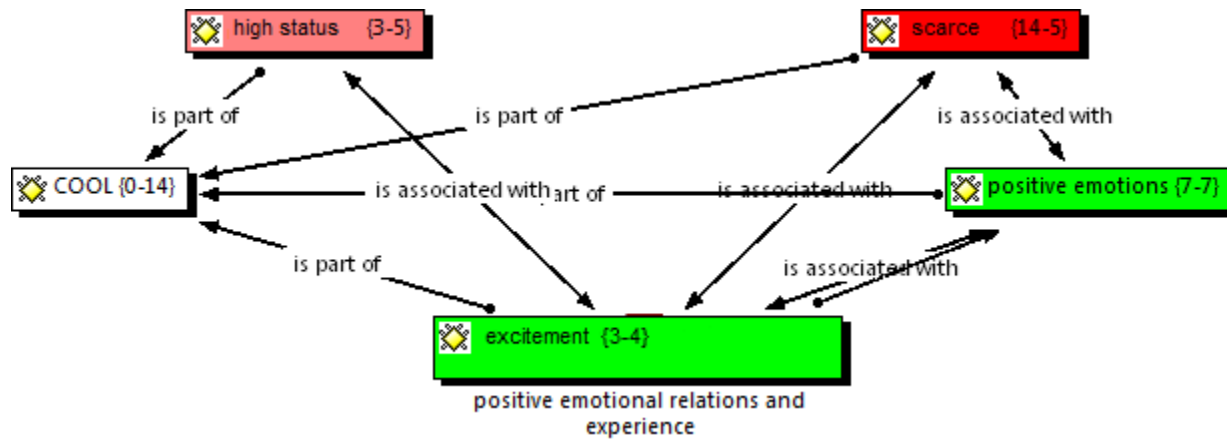
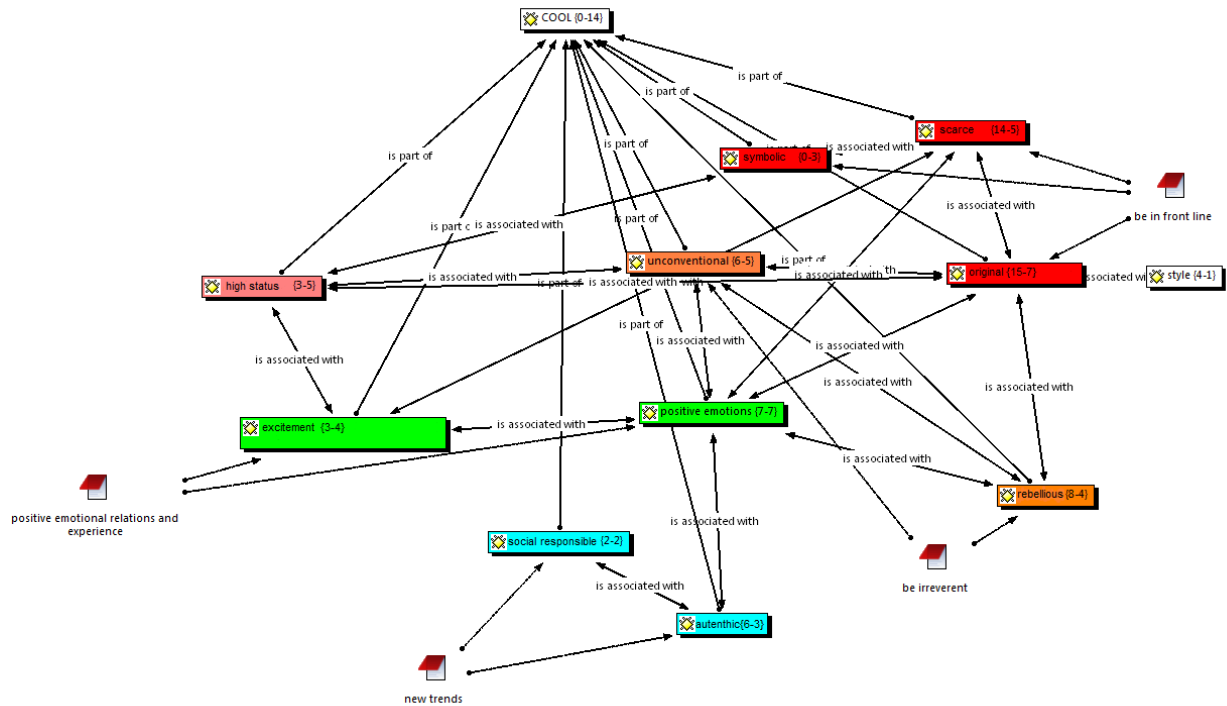
Respondents also suggested that cool brands are scarce, or inaccessible to most people. For example, one respondent wrote, “If I buy a dress and it is cool but if everybody is wearing

the same dress, the dress is not cool anymore.” However, the theme that cool brands are scarce contradicted a more prevalent theme that cool brands are popular. Moreover, prior empirical studies on coolness have not found a link between scarcity and coolness in either people (Dar Nimrod et al. 2012; Horton et al. 2012) or products (Bruun et al. 2016; Runyan et al. 2012; Sundar et al. 2014). Being scarce may help a brand signal high status and offer more symbolic value (Berger and Heath 2007; Heath and Potter 2004). Scarcity may also be true of brands that are niche cool (but clearly not brands that are mass cool). However, both because of the lack of support in prior research and our survey studies (see Web Appendix C), we decided to drop scarcity as a stand-alone characteristic in our final model of brand coolness.

Table B-1: USA Essay Data. The percentage of respondents in this study who wrote that the brand possesses this characteristic for both the cool (second column) and uncool brand (third column). The 4th and 5th columns note the χ^2 and p-values for the difference between the cool and uncool brands.

Characteristic / Definition	Cool Brand	Uncool Brand	χ^2	p-value
Iconic	73	8	66.34	0.001
Useful/Extraordinary	76	71	.55	.46
Subcultural	44	7	27.63	0.001
Original	33	4	21.25	0.001
Aesthetically appealing	25	4	18.85	0.001
Popular	17	4	7.00	0.008
High status	15	4	5.04	0.02
Scarce	15	1	9.06	0.003
Energetic	8	0	6.25	0.01
Authentic	8	3	2.11	0.15
Rebellious	3	0	2.03	0.15
Prosocial	1	1	0	1

Figure B-1: ILLUSTRATIVE ATLAS.ti GRAPHIC ANALYSES



WEB APPENDIX C: DETAILS OF SURVEY PRETEST STUDIES 1-4

Measurement Pre-Studies 1 and 2: Initial Scale Testing and Refinement (Europe)

Based on the literature review and qualitative research, an initial pool of 81 items (available on request) was developed, with input concerning content validity (using the Q-sort technique of Funder et al. 2000) by ten students and three marketing specialists not involved with the research. These 81 items were then administered in an online survey with European consumers (n=416, 51% male, 64% in the age group 20-25) using five-point agree/disagree questions. We first asked participants to name any brand in any product category that they considered to be a cool brand, and to fill out the questionnaire keeping that brand in mind. The most mentioned brands were (in both this study and pre-study #2 below): Apple, Nike, Red Bull, Coca Cola, Adidas, Levi's.

Preliminary exploratory factor analysis (EFA; principal factor analysis with Varimax rotation) of the 81 items revealed 39 items that had either low factor loadings (< 0.40) on an initial set of 10 factors; high cross-loadings (> 0.40); or low communalities (< 0.30) (Hair *et al.*, 2006). For instance, the item 'Nostalgic' present in the initial pool was eliminated due its low factor loading (0.27), high cross-loading (0.62) and low communality (0.23). Other examples were 'simple', with a low factor loading of 0.30 and a low communality of 0.25; 'distinct' with a low factor loading of 0.31 and low communality (0.15). Such items were deleted, and an EFA of the remaining 42 items yielded seven factors (all with an Eigen value > 1) accounting for 66 percent of the total variance and with a KMO measure of sampling adequacy of 0.88. These seven factors were consistent with the *original, high status, socially responsible, authentic, energetic/exciting, scarce, and subcultural* characteristics; not emerging in these initial data were the *useful/extraordinary, iconic/symbolic, rebellious, or popular* characteristics that emerged in

later data. Further item reduction, deleting items that lowered factor-scale reliability, yielded 28 items, with three to five items for each factor. All remaining items had factor loadings above 0.40 and the scales for each factor had coefficient alpha values exceeding 0.70 (Nunnally 1978). In follow-up, confirmatory factor analysis (CFA), each of these factors also demonstrated convergent validity (AVE at least 0.50: Fornell and Larcker 1981), and adequately high composite construct reliability (>.70). The CFA measurement model (using LISREL 8.8) indicated that the seven-factor model fit adequately well (NNFI=0.91, CFI=0.92, RMSEA=0.08, SRMR=0.055 and $\chi^2=1305.58$, $df=343$, $p<0.000$).

To validate the emergent scales (with their 28 items) from pre-study 1 above, further data were collected online in Europe in pre-study 2, yielding 582 usable questionnaires (62% female, 29% of age 18-20, 39% of age 21-24, 16% of age 25-29, rest 30 or above). These data were subjected to CFA using the seven-factor model developed from sample 1, which fit adequately well (NNFI=0.94, CFI=0.95, RMSEA=0.07, SRMR=0.045, and $\chi^2=1162.55$ $df=329$, $p<0.000$). These seven dimensions again possessed convergent validity, with AVE's exceeding 0.50. Scales for all seven also had composite reliabilities larger than 0.60 (Bagozzi and Yi 2012) and all Cronbach' alpha larger than 0.70; all indicators had coefficients of determination above 0.40. Additional details of these analyses are available upon request.

Measurement Pre-Studies 3 and 4: Further Scale Development and Refinement (USA)

Pre-Study 3. Our first USA survey pre-study had two goals: to develop items to measure the four characteristics (useful/extraordinary, iconic/symbolic, rebellious, and popular) that were not adequately captured by the items in the first two pre-studies and to assess the extent to which the findings of the first two European studies would replicate in a broad, national sample of American respondents. We therefore fielded a 20-minute survey to a US national online panel of

adults aged 18 and over, n=258 (51% male; 34% with an undergraduate college degree or higher, 19% with some other college education, 48% with High-School or less education; 31% earning above USD 80K a year, with 22% earning 30K or less; 96% were of age 65 or below, with 71% of age 50 or below, 40% of age 35 or below, and 7% between the ages of 18-21).

The respondents were first asked to name one brand in the consumer electronics category that they used and “really think is ‘cool’” (or comes closest to this). Then they were asked to name a competing brand in the same product category which they felt was not a bad or low-quality brand, but was not really “cool.” They then provided scale ratings of the cool brand, on a set of items assessing the brand characteristics, followed by the same set of ratings for the not-cool brand, and provided classification demographics at the end.

Each rating was provided on 5-point Disagree (=1) /Agree (=5) scales. The list began with four items concerning overall coolness (e.g., “Overall, I personally think this brand is cool”). They then rated the brand on 87 coolness-relevant adjectives on the extent to which they disagreed/agreed that that brand is creative, youthful, genuine, elite etc., as well as some nomologically close constructs (see below). To arrive at these adjectives (full list available on request), we first took the European items that had entered the EFA for pre-study 2, added others that we thought would better match American colloquial usage, and then added more that could potentially capture characteristics that emerged in our qualitative studies and/or the literature review but that had not yet emerged in our initial survey studies (e.g. *iconic/symbolic*, *rebellious*, *popular*, *useful/extraordinary*).

Thus, we developed items potentially capturing the following brand characteristics: *original* (sample items: creative, innovative, different); *high status* (chic, glamorous, elite); *socially responsible* (socially conscious, supports community, good citizen); *authentic* (true to its

roots, genuine, authentic); *exciting/energetic* (youthful, dynamic, exciting); *scarce* (rare, uncommon, inaccessible); *subcultural* (closely tied to a particular sub-culture); *iconic/symbolic* (a cultural symbol, iconic, has a distinct meaning); *rebellious* (edgy, irreverent, controversial); *popular* (well-known, familiar, widely accepted); *useful/extraordinary* (e.g., well-made, works well), and *aesthetic appeal* (design, stylish, looks good). In addition to these measures, other items (using the same format) gauged the extent of self-brand connection and overall attitudes towards the brand (e.g. feel positive about it) for possible nomological modeling in our later studies. The order of the items was randomized.

These data were subjected to EFA (using both principal components and principal axis factoring – Varimax rotation), separately for the cool and uncool brands. Separate analyses were also conducted for those brands/cases rated 4 or 5 on overall coolness and those rated 1, 2 or 3 on that overall coolness. Though the factor structure varied slightly across these analysis sub-groups, a 13 or 14 -factor solution usually emerged. The factors captured the intended characteristics of *originality*, *scarcity*, *status*, *authenticity*, *popularity*, *social responsibility*, *excitement/energetic*, *rebellion*, *aesthetic appeal*, *useful/extraordinary*, and a combined *symbolic/subcultural* characteristic. The data also suggested three additional factors (assessing the extent to which the brand seems cutting edge, traditional, and casual) that we did not initially intend to measure. We also observed a factor containing items of "well-made," "is very satisfying" and "is good," that we decided to develop into what later became our *useful/extraordinary* factor in Studies 5 and 6 (recognizing that it needed to be distinct from attitudinal consequences).

The analyses also identified several items from the prior surveys that did not appear to load cleanly on any of the identified factors in these USA data (e.g. action orientation; in-vogue;

avant-garde), or showed relatively high cross-loadings (e.g. exclusive). Moreover, several factors (e.g. *aesthetic appeal*, *exciting/energetic*, *cutting-edge*, and *rebellious*; and *high status*, *exciting/energetic*, and *scarce*) either showed excessively high correlations with each other, and/or did not yield items with adequately high factor loadings, suggesting that they needed to be measured with more distinct measures. These problems were especially evident in subsequent confirmatory factor analysis (CFA) modeling, some of which used parceled items in unsuccessful attempts to deal with the high correlations observed across many of these factors.

In addition, we compared the means of the individual items across the “cool” versus the “not cool” brands to see if these two groups differed significantly (at $p < .05$) across them. The largest differences appeared on items measuring *originality* and *status*; the smallest (and sometimes non-significant) differences appeared on items measuring the extent to which the brand seems *scarce*, *socially responsible*, *casual*, and *traditional*. Because the items measuring social responsibility (e.g., “is a good citizen;” “supports the community”) did not reliably distinguish between the uncool brands and the cool brands and because of the uneven support for this characteristic in our qualitative studies, we dropped *social responsibility* from further consideration.

Pre-Study 4. Given the observed high correlations across many of the factors in the prior study, the goal of the next USA pre-study was limited to identifying superior (less-correlated, higher-loading) items to replace the problematic ones -- and to help reduce the number of factors to a smaller number of less correlated ones. For example, the prior items “Edgy,” “Rebellious,” “Alternative,” and “Not afraid to break the rules” were replaced by “Unconventional,” “Independent,” “Defiant,” “Individualistic,” “Non-conformist,” and “Revolutionary.” This led to a survey instrument that attempted to measure the characteristics of *aesthetically appealing*, *high*

status, excitement/energetic, rebellious, scarce, and original with 57 items (list available on request).

To permit additional nomological modeling, measures were also collected for additional consequences or correlates: two items measuring overall *brand love* (Batra, Ahuvia and Bagozzi 2012); 22 items measuring the five dimensions of Aaker's (1997) *brand personality* scale (*sincere, exciting, competent, sophisticated, rugged*); three items measuring *word-of-mouth*; nine items measuring the *brand equity* dimensions of *quality, value, and willingness-to-pay* a price premium (Netemeyer et al. 2004); four items measuring *satisfaction* (Oliver 1980); six items measuring *delight* (Finn 2005); and five items measuring *pride* (Tracy and Robin 2007).

The survey was then fielded among 206 M-Turk respondents in the USA. (Thirteen respondents were excluded from analysis because timing data showed they spent 140 seconds or less, or failed attention checks.). The sample was 50% male, 14% below age 25 and 14% above 50 (median age 33), 44% with undergraduate college degrees or higher.

Initial EFA on the data showed that the clearest structure for the items emerged with a six-factor solution. The factors assessed the extent to which the brand seems *original* (different, innovative, inventive, original, does its own thing), *high status* (elite, high class, posh, prestigious, chic, glamorous, sophisticated, ritzy), *aesthetically appealing* (looks good, well designed, attractive, is aesthetically appealing, nice appearance), *exciting/energetic* (energetic, outgoing, lively, vigorous, stimulating), *rebellious* (rebellious, alternative, not afraid to break rules, defiant, non-conformist), and *scarce* (rare, hard to find, uncommon, unusual, not seen everywhere). There were still a number of items that showed either low factor loadings or high cross loadings. Most of the items and constructs discriminated well across cool and less cool brands, except for some of the items measuring scarcity. Because the items measuring scarcity

(e.g., “is rare;” “is inaccessible to most people”) failed to reliably distinguish between cool and uncool brands and because the items showed poor fit in the model, we decided to drop the scarcity characteristic from our model.

WEB APPENDIX D: BRAND MANIPULATIONS AND MEASUREMENT ITEMS

Studies 5 & 6: Brand Elicitation Instructions (coolness manipulated within-subjects)

Cool Brand

“Please think of a brand that you personally think is cool (or the one that comes closest to this). What brand is this? Write its name here: _____”

Uncool Brand

“Now please think of a competing brand in the same product category that you like but that you do not personally think is cool. What brand is this? Write its name here: _____”

Study 7: Brand Elicitation Instructions (coolness manipulated between-subjects)

Cool Brand Condition

“Please think of a brand that you personally think is cool (or the one that comes closest to this).”

Uncool Brand Condition

“Please think of a brand that you like but that you personally do not think is cool.”

Study 8: Brand Elicitation Instructions (coolness manipulated between-subjects)

Uncool Brand Condition

“Please identify a fashion brand that is not cool. Neither you nor the general population consider this brand cool. Neither you, nor the “mass market” think that this brand has ever been cool, today or in the past. A few months ago, r/streetwear readers nominated brands like The Gap, L.L. Bean, and New Balance. If you do not agree that these brands are uncool, we are hoping you can identify another brand that you and other people think is uncool. Please name a brand (it can be one of the brands we mentioned or one that you come up with) that you think provides the best example of a fashion brand that isn’t cool.”

Mass Cool Brand Condition

“Please identify a fashion brand that is cool to mainstream consumers. That is, name a brand that is mass cool. Most other people consider this brand “cool.” The general population or the “mass market” thinks that this brand is cool. A few months ago, r/streetwear readers nominated brands like Nike, Supreme, and A Bathing Ape (Bape). If you do not agree that these brands are mass cool, we are hoping you can identify another brand that most other people consider cool. Please

name a brand (it can be one of the brands we mentioned or one that you come up with) that you think provides the best example of a fashion brand that is mass cool.”

Niche Cool Brand Condition

“Please identify a fashion brand that is cool to you (but not to the mainstream). That is, name a brand that is niche cool. You personally consider this brand cool, but it has not yet become cool to the general population. You think that this brand is cool, but the “mass market” is not yet aware of this brand or does not currently use it. A few months ago, r/streetwear readers nominated brands like Cav Empt, Steady Hands, and Martine Rose. If you do not know these brands, or you do not agree that they are niche cool, we are hoping you can identify another brand that you think is cool that hasn’t yet become mainstream. Please name a brand (it can be one of the brands we mentioned or one that you come up with) that you think provides the best example of a fashion brand that is niche cool.”

Table D-1. Measurement Items for Perceived Brand Coolness in Survey Studies 5-8

1. Useful (studies 5 & 6)
is useful, helps people, is valuable
Extraordinary (studies 6-8)
is exceptional, is superb, is fantastic, is extraordinary
2. Energetic
is energetic, is outgoing, is lively, is vigorous
3. Aesthetically appealing
looks good, is aesthetically appealing, is attractive, has a really nice appearance
4. Original
is innovative, is original, does its own thing
5. Authentic
is authentic, is true to its roots, doesn’t seem artificial, doesn’t try to be something it’s not
6. Rebellious
is rebellious, is defiant, is not afraid to break rules, is non-conformist
7. High status
is chic, is glamorous, is sophisticated, is ritzy
8. Popular
is liked by most people, is in-style, is popular, is widely accepted
9. Sub-cultural
makes people who use it different from other people, if I were to use it, it would make me stand apart from others, helps people who use it stand apart from the crowd, people who use this brand are unique
10. Symbolic
is a cultural symbol, is iconic

© Scale items copyrighted (2019) by the authors; 1 = Strongly Disagree, 7 = Strongly Agree.

Table D-2. Measurement Items for Nomologically Related Constructs in Studies 5-8

Brand Attitude

Study 5 (5-point, strongly disagree to strongly agree): this brand is one that you like; this brand is one that you feel positive toward; this brand is one that you feel favorable toward.

Studies 7 & 8 (7-point semantic differential items): Overall, what is your attitude towards [name of brand]: dislike-like; negative-positive; unfavorable-favorable

Experiment (7-point semantic differential items): Based on what you just read, what is your attitude towards Voss: bad-good; negative-positive; unfavorable-favorable

Brand Exposure

Studies 7 & 8: In the past few months, how often have you heard other people talk about [brand name] (either online or offline)?; In the past few months, how often have you heard the media (news, fashion blogs, etc.) talk about [brand name]?; In the past few months, how often have you seen [brand name] advertised?; Response options: 1 = never; 2 = once; 3 = two or three times; 4 = more than three times

Brand Familiarity

Studies 7 & 8 (5-point, strongly disagree to strongly agree): This brand is well-known; Most people are familiar with this brand; A lot of people are aware of this brand

Brand Love (Batra et al. 2012)

Studies 5 – 8 (5-point, not at all-A lot): Overall, how much do you love this brand?; To what extent do you feel love toward this brand?

Brand Personality (Aaker 1997)

Studies 5 & 7 (5-point, not at all descriptive-very descriptive): How would you describe the personality of [brand name]?

Sophisticated: pretentious; romantic; glamorous; upper class; charming

Competent: dependable; reliable; efficient; up-to-date; responsible

Rugged: rugged; outdoorsy; tough; strong

Exciting: imaginative; daring; spirited

Sincere: domestic; honest; wholesome; cheerful; genuine

Delight (adapted from Finn 2005)

Study 5 (5-point, disagree-strongly agree): This brand makes me feel: delighted; gleeful; elated; in a good mood; happy; cheerful

Price Premium

Studies 7 & 8 (5-point, strongly disagree-strongly agree): This brand costs more than others in the same product category; People are willing to pay more for this brand than other brands

Pride (Tracy and Robins 1997)

Study 5 (5-point, strongly disagree-strongly agree): This brand gives its owners a sense of

accomplishment; This brand gives its owners a feeling of success; Those who own this brand can feel a sense of pride owning it; This brand gives its owners a feeling of confidence; Those who own this brand get a sense of achievement from it

Satisfaction (Netemeyer et al. 2004)

Study 5 (5 –point, strongly disagree-strongly agree): This brand makes me satisfied after the buying decision; This brand makes me feel good after buying it; This brand is better than what I expected

Self-Brand Connection (Adapted from Escalas and Bettman 2003)

Studies 5 - 8 (5-point, strongly disagree-strongly agree): This brand reflects who I am; I can identify with this brand; I feel a personal connection to this brand; I (can) use this brand to communicate who I am to other people; I consider this brand to be “me”

Willingness-to-Pay

Study 5 (5-point, strongly disagree-strongly agree; from Netemeyer et al. 2004): The price of this brand would have to go up quite a bit before I would switch to another brand; I am willing to pay a higher price for this brand.

Studies 6 – 8 (5-point, strongly disagree-strongly agree): I am willing to pay more for this brand than other brands in the same product category; I am willing to pay a higher price for this brand than other brands.

Experiment: Voss watches typically sell for a retail price of between \$500 and \$600. If you were interested in purchasing a wrist watch, what is the most that you would you be willing to pay for a Voss watch? Response options: 1 = Less than \$100; 2 = between \$100 and \$200; 3 = Between \$200 and \$300; 4 = Between \$300 and \$400; 5 = Between \$400 and \$500; 6 = Between \$500 and \$600; 7 = More than \$600.

Word-of-Mouth

Studies 5 & 6 (5-point, strongly disagree-strongly agree): I frequently feel the urge to discuss this brand; I often want to talk about the brand with my friends; I frequently feel the urge to mention the brand in my online communications; I often want to discuss the brand with others.

Studies 7 & 8:

Past word-of-mouth: In the past few months, how often have you talked about (brand) with other people (online or offline)?; Response options: 1= Never; 2 = Once; 3= Two or Three times; 4 = More than three times

Future word-of-mouth (7-point, unlikely–likely): How likely are you to talk about (brand) with other people (online or offline) in the next couple of months?

Experiment (7-point, not likely-very likely): If you had a friend who was looking for a wrist watch, how likely would you be to mention this brand to him or her?

Table D-3. Measurement Items for Perceived Coolness

Perceived Coolness (self)

Studies 6-8 (7-point, uncool-cool): To what extent do you personally consider this brand cool?

Perceived Coolness (others)

Studies 7-8 (7-point, uncool-cool): To what extent do other people consider this brand cool?

Change in Coolness (future)

Study 8: Looking forward, how do you expect the coolness of this brand to change in the next year or two?; Response options: -1 = I think this brand will be less cool in the future than it is today; 0 = The coolness of this brand will probably not change in the next couple of years; 1 = I think this brand will be more cool in the future than it is today

Change in Coolness (past)

Study 8: Looking back, how has the coolness of this brand changed over the last couple of years?; Response options: -1 = This brand was more cool a few years ago than it is now; 0 = The coolness of this brand has not changed much in the past couple of years; 1 = This brand is more cool now than it was a few years ago; 1: the brand did not exist a few years ago.

Perceived Coolness (general)

Experiment (7-point, uncool-cool): Based on what you just read, to what extent do you consider Voss cool? Based on what you just read, to what extent would your close friends consider Voss cool?

Table D-4. Manipulations in the experiment.

Characteristic(s)	Characteristic present	Characteristic absent
Desirability (Extraordinary, Aesthetic, Exciting)	Voss watches have a lively and energetic image. The brand is known for making watches with extraordinary features and attractive designs.	Voss watches have a dispirited and lethargic image. The brand is known for making watches with ordinary features and designs that aren't especially attractive.
Autonomy (Original, Authentic)	Voss watches are innovative and original. Most consider the brand authentic because it never strays from its roots just to try to make money or to follow other watch brands.	Voss watches are neither particularly innovative nor original. Most consider the brand inauthentic because it often strays from its roots to try to make money or to follow other watch brands.
Rebellion	Voss is a rebellious brand. The company regularly defies convention and is not afraid to break the rules.	Voss is not a rebellious brand. The company rarely defies convention and prefers to follow the rules.
Status	Voss watches are glamorous and sophisticated. It is generally seen a status symbol, not an everyday brand.	Voss watches are neither glamorous nor sophisticated. It is generally seen as an everyday brand, not a status symbol.
Popularity	Voss watches are popular and in-style. Most people are aware of and like the brand.	Voss watches are neither popular nor in-style. Few people are aware of or like the brand.

WEB APPENDIX E: TESTING FOR EQUIVALENCE ACROSS SUBSAMPLES

We formally tested the equivalence of the measurement model lambda coefficients, and the structural (higher-order) model beta coefficients, in the three survey datasets (5, 6, 7) in which we are able to estimate separate models for cool versus non-cool brands (see Table 2). The Table presents their “within-group completely standardized solution” lambda/beta coefficients, for easier and more intuitive interpretation. However, the formal tests of invariance for specific coefficients used the unstandardized coefficients and covariance matrices, as is more appropriate.

1. In Study 5, we estimated many models that imposed equality (versus not) of individual coefficients. For the model testing the equivalence of model structure, we cannot reject this model: Global Goodness of Fit Statistics: Degrees of Freedom (df) = 1164; Minimum Fit Function Chi-Square = 2565.80 ($p < .001$); Root Mean Square Error of Approximation (RMSEA) = 0.064; Non-Normed Fit Index (NNFI) = 0.98; Comparative Fit Index (CFI) = 0.98; Standardized RMR = 0.072. The results showed that all higher-order loadings are equal across cool and non-cool brands except for one, beta 12 1, which is the loading of subculture on the Cool higher-order factor. The chi-square difference test showing that this unstandardized loading is not equal across the two groups is chi-square difference=7.94 with 1 df and $p < .005$. The standardized loading in the Cool sample is .53 and in the non-cool sample .61, so even though they are not identical, they are not too far apart. All other higher loadings show a chi-square difference=13.99 with 8 df, $p > .08$, which means we cannot reject the hypothesis that the rest of the higher order loadings are equal for cool and non-cool brands. For the first-order factor loadings (lambdas), all but five unstandardized loadings are statistically equal across cool and non-cool, and even these five are still quite close when their standardized coefficients are compared (see table 1), and for all of these five the other measures of that component/factor are

invariant. The chi-square test showing the remaining loadings are invariant is $\chi^2=24.48$ with 21 df and $p > .27$. Since it only takes one invariant loading per factor to establish partial metric invariance (Byrne, Shavelson, & Muthén 1989), partial invariance is established, and this is typically considered satisfactory when comparing loadings across groups with so many factors and lambdas, and with real consumers; to expect all of them to be statistically equal is unrealistic. The five that do vary at the unstandardized level are lambda 10 6 (the third measure of aesthetic); lambdas 20 9 and 21 9 (the second and third measures of rebellious); and lambdas 32 12 and 33 12 (the second and third measures of subculture). Even in these cases, the standardized loadings are almost always very close; the overall evidence for equivalence is thus quite strong.

2. In Study 6, we cannot reject the model testing the equivalence of model structure. The Global Goodness of Fit Statistics were: $df = 1234$; $\chi^2 = 3278.62$ ($p < .001$); $RMSEA = 0.074$; $NNFI = 0.98$; $CFI = 0.98$; $SRMR = 0.055$. For the test of the equality of the second-order loadings (betas), the chi-square difference = 13.49, 9 df, $p > .14$, which means we cannot reject the hypothesis that all betas are equal. The test for equality of all lambdas for cool and non-cool (the first-order loadings) showed that we have to reject this hypothesis, which means one or more lambdas differs across cool and non-cool. We then found that all unstandardized lambdas are equal except two: the third item for original, and the third item for authentic. The test showing that all other loadings except these two are equivalent is chi-square difference = 37.13, with 25 df, $p > .05$.

3. In Study 7, we cannot reject the model testing the equivalence of model structure. The Global Goodness of Fit Statistics were: $df = 1234$; $\chi^2 = 2847.38$ ($p < .001$); $RMSEA = 0.08$; $NNFI = 0.96$; $CFI = 0.97$; $SRMR = 0.11$. For the test of the equality of the second-order loadings

(betas), the chi-square difference = 38.71, 9 df, $p < .001$, which means we have to reject the hypothesis that all betas are equal. Further testing revealed that the three betas that were statistically unequal were beta (5,2) of the energetic factor (.85 vs. .78 standardized), beta (11,1) of the popular (.87 vs. .58), and (12,1) of the symbolic factors (.73 vs. .52). With these allowed to be unequal, the chi-square difference test with 6 df = 7.70, $p > .26$. The test for equality of all lambdas for cool and non-cool (the first-order loadings) showed that we cannot reject this hypothesis (chi-square difference=33.92 with 27 df, $p > .16$), which means that all first-order loadings are now equal across cool and non-cool brands.

The overall conclusion is that in the vast majority of cases the factor loadings and structural coefficients are statistically equal across cool and non-cool brands. When they are not equal, there still are items on those factors that are equal, and at the same time the unequal loadings are usually quite close in a practical sense.

WEB APPENDIX F: TESTING FOR DISCRIMINANT VALIDITY

We tested discriminant validity in Studies 5-8 by estimating the disattenuated, latent, psi correlations between multiple pairs of variables to test if the 95% confidence intervals of these fell significantly below 1.0 in all pairs (Bagozzi and Yi 2012).

Brand Coolness and Brand Attitudes. We found in Study 5 that the relations between higher-order brand coolness and attitude valence, while high and significant (.64 for Cool, .76 for Not Cool) are not so high as to threaten the discriminant validity between these two constructs. Second, in no case were the correlations between any of the individual coolness components, and brand attitudes, higher than 0.63, and all were significantly below 1.0. In Study 7, HOBC correlates 0.56 (.06) and 0.40 (.07) with brand attitudes. In Study 8 the phi of HOBC with brand attitudes was .74 (.04), pooled across the 3 types of brands (niche cool, mass cool, non-cool).

Brand Coolness and Brand Love, Self-Brand Connections, etc. In Study 5, estimates of the psi correlations (a) across the brand coolness components, (b) between them and each of the dependent variables (brand love, self-brand connections, word of mouth, willingness to pay, delight/affect, satisfaction, and pride), and (c) among all these dependent variables, showed all of them (for both the cool and non-cool brand samples) to be 0.86 or below (most between .35 and .65), with the 95% confidence intervals significantly below 1.0 in all pairs, establishing discriminant validity between brand coolness and these other constructs. In Study 6, these phi's between HOBC and BL are .44(.05) and .76(.03), and with SBC .64(.04) and .76(.03), for cool and non-cool brands respectively. The phi between BL and SBC ranges from .53-.87(.05). In Study 7, the phi's of HOBC and BL for cool and non-cool brands are .59(.06) and .42(.07), and with SBC .59(.05) and .50(.06). BL and SBC correlate .76-.79 (.04) with each other in these two samples. In Study 8 the phi's of HOBC with BL and SBC are .84(.03) and .80(.04), pooled

across the 3 types of brands (niche cool, mass cool, non-cool). Thus, discriminant validity obtains in each pair tested. While some of these disattenuated correlations are high, it should be remembered that such coefficients are usually noticeably higher than uncorrected Pearson correlations using manifest scales: an 0.8 phi might be equivalent to a Pearson correlation of 0.6, for example. Importantly, though these disattenuated correlations between HOBC and BL are usually around 0.6 at this disattenuated level, they are as distinct as BL and SBC – two constructs widely accepted as distinct – are from each other, often more so.

Brand Coolness with Brand Personality. In Study 5, tests of discriminant validity were also conducted between each of the five individual brand personality correlates and three individual lower-order factors of brand coolness: energetic, original and high status. Each of these pairs of disattenuated correlations, for both the cool and not cool samples, were significantly below 1.0, and ranged from 0.47 to 0.81. Detailed results of these tests are available upon request. In Study 7, we again estimated the disattenuated correlations (phis) in our data between the five brand personality dimensions and HOBC, separately for the cool and non-cool brands data. Each of these pairs of disattenuated correlations were significantly below 1.0, and ranged from 0.32 to 0.76 (cool brand sample) and .36 to .87 (non-cool brands sample).

TABLE F-1: Discriminant validity tests using latent psi correlations (standard errors)

Brand Sample: CONSTRUCT PAIR:	Study 5		Study 6		Study 7		Study 8
	Cool	Uncool	Cool	Uncool	Cool	Uncool	Pooled
Brand Coolness, Brand Attitudes	.64 (.04)	.76 (.02)			.56 (.06)	.40 (.07)	.74 (.04)
Brand Coolness, Brand Love	.62 (.04)	.76 (.02)	.44 (.05)	.76 (.03)	.59 (.06)	.42 (.07)	.84 (.03)
Brand Coolness, Self-Brand Con.	.69 (.03)	.74 (.02)	.64 (.04)	.76 (.03)	.59 (.05)	.50 (.06)	.80 (.04)
Brand Love, Self-Brand Con.	.66 (.03)	.83 (.01)	.53 (.05)	.87 (.02)	.76 (.04)	.79 (.04)	
Brand Coolness, BP: Sophisticatn	.70 (.03)	.83 (.02)					
Brand Coolness, BP: Ruggedness	.70 (.03)	.74 (.03)					
Brand Coolness, BP: Competence	.41 (.05)	.62 (.03)					
Brand Coolness, BP: Excitement	.71 (.03)	.76 (.02)					
Brand Coolness, BP : Sincerity	.69 (.03)	.66 (.03)					
Brand Coolness, WOM			.55 (.05)	.71 (.03)			
Brand Coolness, WTP			.59 (.06)	.77 (.03)			
Brand Love, WOM			.45 (.05)	.76 (.03)			
Brand Love, WTP			.64 (.06)	.85 (.02)			
Self-Brand Con., WOM			.73 (.03)	.89 (.01)			
Self-Brand Con., WTP			.66 (.05)	.91 (.02)			
WOM, WTP			.56 (.06)	.81 (.02)			

Note: Some variables did not form part of some studies (e.g. brand attitudes in Study 6; see Table 3). For ease of estimation, not all pairs of correlations were estimated in each study.

WEB APPENDIX G: TESTING FOR MEDIATION

Below are details of our tests of mediation between higher-order brand coolness (HOBC), predicting Brand Attitudes (BrAtt), Word of Mouth (WOM), and Willingness to Pay (WTP) as dependent variables, with Brand Love (BL) and Self-Brand Connections (SBC) both as possible mediators (jointly):

(1) In Study 5, for the cool brands data, HOBC significantly affects BL (.62) and SBC (.69); BL significantly affects BrAtt (.22), WOM (.22), WTP (.27); SBC significantly affects BrAtt (-.11), WOM (.43) and WTP (.23); and HOBC also directly and significantly affects BrAtt (.58) and WTP (.17) but not WOM (.08, n.s.). So, BL and SBC fully mediate the effects of HOBC on WOM, but partially mediate the effects of HOBC on BrAtt and WTP. In other words the direct paths from HOBC to BrAtt and WtP are significant (showing partial mediation by BL and SBC), whereas the direct path from HOBC to WoM is nonsignificant (so, complete mediation). The model fit well (e.g., NNFI, CFI both 0.97). Unfortunately we were unable to successfully estimate the equivalent mediation model on the non-cool brands data, with too-high correlations creating a non-positive-definite matrix.

(2) In Study 6, cool brands data, HOBC significantly affects BL (.23) and SBC (.61); BL significantly affects WTP (.52) but not WOM (.15, n.s.); SBC significantly affects WOM (.68) and WTP (.23); and HOBC also directly and significantly affects WTP (.12) but not WOM (.09, n.s.). So again SBC fully mediates the effects of HOBC on WOM, but partial mediation occurs through SBC and BL for WTP. This particular data set did not measure BrAtt. The model fit well (e.g., NNFI, CFI both 0.98). In the uncool brands data, HOBC significantly affects BL (.84) and SBC (.78); BL significantly affects WTP (.17) but not WOM (-.11, n.s.); SBC significantly affects WOM (.95) and WTP (.61); and HOBC also directly and significantly affects WTP (.10)

but not WOM (.05, n.s.). So again SBC fully mediates the effects of HOBC on WOM, but partial mediation occurs through SBC and BL for WTP. The model fit well (e.g., NNFI, CFI both 0.99).

(3) In Study 7, cool brands data, HOBC significantly affects BL (.77) and SBC (.67); BL significantly affects BrAtt (1.86), WTP (1.34) and WOM (0.55); SBC significantly affects BrAtt (-1.01) but does not significantly affect WOM or WTP. HOBC also directly and significantly affects BrAtt (0.61) and WTP (.65) but not WOM. So BL fully mediates the effects of HOBC on WOM, but partial mediation occurs through BL for BrAtt and WTP. In the non-cool brands data, HOBC significantly affects BL (.81) and SBC (.85); BL significantly affects BrAtt (0.67), but not WTP or WOM; SBC significantly affects BrAtt (0.25), WOM (.34), and WTP (0.61). HOBC also directly and significantly affects BrAtt (0.30), WTP (.59) and WOM (.16). So in this non-cool brands sample, SBC partially mediates the effects of HOBC on all 3 DVs, and partial mediation also occurs through BL for Brand Attitudes. All the models in this study fit well (e.g., NNFI, CFI = 0.96 or more).

Table G-1. Results for the mediation tests (all coefficients significant at the $p < .05$ level or better, unless otherwise indicated).

A. Study 5	Independent variables					
Dependent Variables ↓	Cool brands			Uncool brands		
	Coolness	BrandLove	SBC	Coolness	BrandLove	SBC
Brand Love	.62			--		
SBC	.69			--		
Brand Attitude	.58	.22	-.11	--	--	--
WOM	.17	.22	.43	--	--	--
WTP	ns	.27	.23	--	--	--
B. Study 6 (Brand attitude not measured in this study)						
Brand Love	.23			.84		
SBC	.61			.78		
Brand Attitude	--	--	--	--	--	--
WOM	ns	ns	.68	ns	ns	.95
WTP	.12	.52	.23	.10	.17	.61
C. Study 7						
Brand Love	.77					
SBC	.67					
Brand Attitude	.61	1.86	-1.01	.30	.67	.25
WOM	ns	.55	ns	.16	ns	.34
WTP	.65	1.34	ns	.59	ns	.61

Note: for uncool brand sample in Study 5, estimation problems occurred in the program and prevented the computation of coefficients.

WEB APPENDIX H: VARIANCE-EXPLAINED MODEL ESTIMATES

Presented below are estimates of the variance explained by Higher Order Brand Coolness (HOBC) in Brand Attitudes (BrAtt), Word of Mouth (WOM) and Willingness to Pay (WTP), relative to that explained by Brand Love (BL) and Self-Brand Connections (SBC).

In Study 5, in the cool brands sample, the percent variance explained in BrAtt by HOBC by itself (49%) exceeds that percent explained just by BL (26%) or SBC (19%). For WOM, the equivalent percentages are 52, 32, and 41. For WTP, they are 32, 29, and 29. In the non-cool brands sample, the variance explained in BrAtt by HOBC by itself (70%) again exceeds that explained just by BL (65%) or SBC (55%). For WOM, the equivalent percentages are 55, 47, and 66. For WTP, they are 61, 57, and 62.

In Study 6, in the cool brands data, the variance explained in WOM by HOBC by itself is 32%, vs. 44% by BL alone and 55% by SBC alone. For WTP, the variance explained by HOBC by itself is 38%, vs. 63% by BL alone and 50% by SBC alone. (This particular study did not collect brand attitudes data.) In the non-cool brands data, the variance explained in WOM by HOBC by itself is 57%, vs. 74% by BL alone and 79% by SBC alone. For WTP, the variance explained by HOBC by itself is 67%, vs. 86% by BL alone and 84% by SBC alone.

In Study 7, in the cool brands data, the variance explained in BrAtt by HOBC by itself is 54%, vs. 48% by BL alone and 22% by SBC alone. The variance explained in WOM by HOBC by itself is 32%, vs. 35% by BL alone and 32% by SBC alone. For WTP, the variance explained by HOBC by itself is 38%, vs. 45% by BL alone and 33% by SBC alone. In the non-cool brands data, the variance explained in BrAtt by HOBC by itself is 32%, vs. 85% by BL alone and 64% by SBC alone. The variance explained in WOM by HOBC by itself is 57%, vs. 25% by BL alone

and 26% by SBC alone. For WTP, the variance explained by HOBC by itself is 67%, vs. 47% by BL alone and 47% by SBC alone.

In Study 8, in the pooled (niche cool + mass cool + non-cool brands) data, the variance explained in BrAtt by HOBC by itself is 66%, vs. 71% by BL alone and 67% by SBC alone. For WOM, the variance explained by HOBC itself is 43%, vs. 43% by BL alone and 33% by SBC alone. For WTP, the variance explained by HOBC by itself is 79%, vs. 81% by BL alone and 70% by SBC alone.

Note that in the results reported above from the two studies (5, 7) which also independently measured Aaker's 5 brand personality factors, we included these BP factors as covariates, so that the effects reported for HOBC already partial out the effects of those BP factors, if any. It should also be remembered, in interpreting these variance-explained percentages, that the BL and SBC scales used in our studies are simpler/overall scales, and thus more likely to show artificially inflated shared variance with the simpler/overall DVs, than the finely-detailed multiple brand coolness items used in our survey instrument.

WEB APPENDIX I: MARKER VARIABLE TESTS FOR METHODS FACTOR BIAS

We tested the degree to which common method bias may be affecting our structural and measurement models using the “marker variables” technique presented in Williams, Hartman and Cavazotte (2010). In both studies 7 and 8, we asked respondents about their experience with and expectations of service quality in restaurants (4 agree-disagree items; e.g., “most restaurants serve their customers well”), which are not related meaningfully, in both a theoretical and empirical sense, to the constructs of interest in this paper.

In Study 7, what Williams et al. call the CFA model (see their Figure 2, p. 497) shows that our marker factor does not correlate at a meaningfully high level with either higher-order brand coolness (HOBC), Brand Love, Brand Attitudes, future Word of Mouth Intentions (WOM), or Willingness to Pay (WTP). We then estimated their method U and R models (Figure 4 of Williams et al.), and compared them, to conduct a statistical test for whether our 15 substantive correlations are "significantly biased by marker variable method effects." Our 15 correlations include the 5 between Cool and SBC, BL, BrAtt, WOM, and WTP, and the 10 correlations among SBC, BL, BrAtt, WOM, and WTP. In our case, they are not different; after correcting for the marker variable effects, all 15 correlations remained the same. In the cool brands data, the chi-square difference test between Method U and Method R models is 4.85 with 15 degrees of freedom, $p > .99$, which means that we cannot reject the hypothesis that all our 15 correlations are the same with and without taking into account the marker variables. (For the R model: χ^2 with 1381 df, $p < .001$; for the U: $\chi^2=3217.32$ with df 1366, $p < .001$). In the non-cool brands data, the chi-square difference test between Method U and Method R models is 0.62 with 15 degrees of freedom, $p > .99$, which again means that we cannot reject the hypothesis that all our 15 correlations are the same with and without taking into account the marker variables. (For

the R model: χ^2 with 1381 df, $p < .001$; for the U: $\chi^2=2909.21$ with df 1366, $p < .001$). All our models fit well.

In Study 8, similar results obtain across the pooled data for niche cool, mass cool, and non-cool brands. We again estimated the method U and R models and compared them, to conduct a statistical test for whether our 15 substantive correlations are "significantly biased by marker variable method effects." They are again not different; after correcting for the marker variable effects, all 15 correlations remain the same. The chi-square difference test between Method U and Method R models is .42 with 15 degrees of freedom, which is non-significant and means that we cannot reject the hypothesis that all our 15 correlations are the same with and without taking into account the marker variable hypothesis. (For the R model: χ^2 with 1381 df, $p < .001$; for the U: $\chi^2=2770.01$ with df 1366, $p < .001$). The models fit well, with all of the CFI's and NNFI being .97 and our RMSEA's = .07.

WEB APPENDIX J: DETAILS ABOUT STUDY 8 (REDDIT STREETWEAR STUDY)

Pretests

In order to get a better understanding of the brands that this group considered niche cool (i.e., cool to them but largely unknown) and mass cool (i.e., cool to others), we began by conducting a focus group and qualitative pretests with members of the subculture. The focus group involved a 90-minute video conferencing discussion with four graduate students enrolled in a highly ranked fashion program at the Parsons School of Design. The pretests included netnography (Kozinets 2002) by following online forums related to streetwear fashion and an open-ended survey posted on the Reddit forum r/streetwear.

Our pretests revealed two critical pieces of information. One, streetwear enthusiasts tended to agree on which fashion brands were niche cool (e.g., Cav Empt, Steady Hands), mass cool (e.g., Nike, Supreme), and uncool (The Gap, Skechers), although there was some disagreement within the group, especially about whether some brands, like Off White, were niche or mass cool. In order to help participants in study 8 better understand the distinctions between niche cool, mass cool, and uncool, the instructions for the study provided examples of the brands most frequently noted in the pretests as being niche cool (Cav Empt, Steady Hands, Martine Rose), mass cool (Nike, Supreme, and a Bathing Ape), and not cool (The Gap, L.L. Bean, New Balance).

Two, streetwear enthusiasts typically considered brands that our research team (as outsiders) most strongly associated with streetwear, including BAPE (a Bathing Ape) and Supreme, to be mass cool. This highlights the importance of acquiring the subjective perspective of members of a particular subculture when trying to understand the properties of niche cool

brands. It also suggests that, unless you are part of the subculture that first makes a brand cool, knowing about a brand is a sign that it has probably already become mass cool (Gladwell 1997).

Post recruiting participants on r/streetwear

“Hi /r/streetwear, this is [names of researchers], two researchers at the [name of university]. We would like your help with an academic research study on fashion. For our research, we need people to respond to questions on different fashion brands. For participating in our research, you will receive reddit gold. The study should take approximately 5 to 10 minutes of your time. We suggest that you complete this study on a tablet, laptop, or desktop computer as some of the questions are somewhat more difficult to answer on mobile phones. Once you have completed the study, we will ask for your reddit username. Next, we ask that you simply comment on this post - without divulging any information about the study - and we will gild your comment once we confirm you completed the study. Unfortunately, our budget is not unlimited. Once we reach 200 started surveys, the survey link will deactivate. We will update this post to let you know when the study is dead, and will be happy to discuss the study and our predictions with you more at that time.”

Instructions (all conditions)

“In this study, we want to know your impression of a particular type of fashion brands. In particular, we are going to ask you questions about a brand that you personally think is cool (i.e., niche cool), a brand that mainstream consumers think is cool (i.e., mass cool), or a brand that is uncool. The survey also includes questions that ask about your opinions towards other types of retailers and some measures about your general values and beliefs.

Please note that some of the questions will ask you about the same ideas as other questions, but will be worded slightly differently -- do not be surprised or upset by this, it is deliberate. So please read each question carefully and respond thoughtfully. There will also be some questions that will be checking if you are paying attention.

We expect that the survey will take most people about 10 minutes to complete, although response times will vary depending on how quickly you answer the questions. You can stop at any time simply by closing your browser window.

If you complete the survey and take the following two steps, we will thank you by gilding you with Reddit Gold.

Step 1: leave your username at the end of the survey.

Step 2: comment on the Reddit post saying that you completed the survey.

We will gild your comment after we have confirmed that you completed the study. Thanks!”

ADDITIONAL REFERENCES CITED IN WEB APPENDICES

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