Behavioral validation of the rudeness scale: evidence from retrospective and prospective research

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Abstract

Purpose – The purpose of this paper is to behaviorally validate the Rudeness Scale (RS), a self-report measure of the propensity to verbally abuse strangers, using both a retrospective design (Study 1) and a prospective design (Study 2).

Design/methodology/approach – In Study 1, participants (n = 280) completed an online survey that contained the RS and a retrospective checklist measure that assessed how often they had engaged in specific confrontational behaviors during the past year. In Study 2 (n = 109), participants first completed an online survey that contained the RS and then later completed an experimental session in which they received, and immediately responded to, rude instant messages sent by another "participant."

Findings – In Study 1, a multiple regression analysis revealed that scores on the RS were positively associated ($\beta = 0.39$) with scores on the retrospective checklist measure of ugly confrontational behaviors. In Study 2, a multiple regression analysis revealed that scores on the RS were positively associated ($\beta = 0.30$) with the level of "retaliatory" rude behavior the participants displayed in their instant messaging conversation. Together, these findings reveal that people with high RS scores are more likely, first, to have acted in offensive and confrontational ways in the past (Study 1), and second, to act this way in the present (Study 2).

Originality/value – Although previous studies have provided evidence for the convergent validity of the RS and established a preliminary personality profile of rude individuals, the present studies are the first to explore the behavioral validity of the scale.

Keywords Rudeness, Retaliation, Validation, Behavioral validation, Individual differences, Ugly confrontational behavior

Paper type Research paper

In 2007, the actor Alec Baldwin left an infamous voicemail for his then 11-year-old daughter Ireland, calling her a "rude, thoughtless, little pig" when she failed to answer his phone call (Friedman, 2007). This voicemail was then leaked to the media, which created a firestorm of negative publicity for the actor. Despite the public disgrace that resulted from this incident, Baldwin continued to display similar outbursts in response to perceived offenses (Rothman, 2014). In a more recent incident, the actor confronted a paparazzo and yelled a homophobic slur at him even though they were in the presence of witnesses and cameras (Rothman, 2014).

Baldwin's outbursts fit the definition of rude behavior proposed by Porath and Erez (2007), who characterized it as "insensitive or disrespectful behavior enacted by a person that displays a lack of regard for others" (p. 1181). This type of disrespect can take many forms. For example, in their study of actual accounts of rude incidents, Smith et al. (2010) discovered that the majority of rude acts could be classified into four broad categories. In the first category are rude acts that involve movement and encroaching upon someone's personal space, such as cutting in line or physically running into someone. In the second category are acts of abusive

verbal communication, such as cursing and offensive comments like those made by Mr Baldwin. The acts in the last two categories include offensive bodily behaviors, such as spitting and indecent gestures, and disruptive noises, such as talking out loud while a film is being shown.

Understandably, any of these four types of rude acts can be distressing for victims, but there is evidence that the effects of rudeness go beyond a trivial emotional response. In a recent review article, Porath and Erez (2011) argued that rudeness has a variety of negative effects that can ultimately "tarnish a culture" (p. 511). For instance, rudeness affects subsequent cognitions, performance, and interpersonal behavior. In one experimental study, Porath and Erez (2007) found that participants who were the victims of even one mild act of rudeness performed significantly worse on a creativity task than those who did not experience rudeness. In addition, the participants who experienced rudeness were less likely to help another person pick up something they had dropped, even when this person was not the person who had mistreated them. In a later study, the researchers found that these effects extended even to the witnesses of a rude incident (Porath and Erez, 2009) and also primed aggressive thoughts in their minds. For example, participants who had witnessed rudeness were more likely to rearrange a nonsense word such as "remdue" into the word "murder," rather than a more neutral word like "demure."

The evidence that rudeness can lead to deficits in performance and negative interpersonal behavior in both victims and onlookers underscores how critical it is that additional research be conducted in this area. In particular, more research should focus on the perpetrators of rude behavior. Ickes *et al.* (2012) took initial steps in this direction by developing a self-report measure, the Rudeness Scale (RS), that was intended to identify individuals who have the propensity to engage in verbal rudeness towards strangers.

In previous research, rudeness has been measured in various ways, such as how long it takes someone to honk their horn at a car that is idling at a green light (Ahmed, 1979), how quickly individuals interrupt others during conversation (Bargh *et al.*, 1996), and self-report ratings on verbal aggression scales (Buss and Perry, 1992; Infante and Wigley, 1986). The RS also assesses rudeness via verbal aggression, but it is intended to measure a particular type of verbal rudeness – one that is reactionary, confrontational, and intentional. Each of the items on the RS offers the respondent a full range of responses ranging from reparative (e.g. saying "I'm sorry") to offensively confrontational (e.g. saying "F**k you")[1], and our research focusses particularly on individuals who consistently endorse the offensively confrontational response options.

It is important to distinguish this highly confrontational form of rudeness from more benign or unintentional forms of rudeness such as talking too loud on a cell phone or accidentally bumping into someone else's shopping cart. Unintentional and non-confrontational rudeness is often recognized as such, and although it can sometimes provoke an angry response, there is usually room for doubt about whether any genuine offence was intended. On the other hand, intentional, confrontational rudeness is blatant and "in your face," and it tends to incite, and even invite, the escalation of tension and mutual animosity. Because this highly inflammatory form of rudeness is the one most likely to lead to acts of aggression and violence, it is the particular focus of our research.

To develop items for the RS, Ickes *et al.* (2012) used a prototypic situation that Limberg (2009) identified as one that sharply differentiates rude and non-rude individuals (see also Bousfield and Locher, 2008). In this situation, Person A challenges the normative or moral appropriateness of the behavior displayed by Person B:

> At the surface level, A's communication to B is presented as a seemingly well-intentioned bid to get B to respond in a way that simultaneously, (a) acknowledges fault, (b) makes a gesture toward "repairing" it, and (c) respects Person A (i.e. preserves Person A's "face") for issuing the challenge. There is always the risk, however, that Person B will not accept Person A's challenge as a well-intentioned opportunity to repair the situation while permitting the mutual preservation of "face," but will instead view it as A's attempt to get one-up by putting B in his or her place, that is, one-down.

> From B's perspective, the choice is to accept A's bid at face value, along with the humbling – or worse yet, the humiliation – that goes with it, or to reject A's bid and assert B's claim to unimpugned status.

This counter-response by B of rejecting A's bid can vary greatly along a dimension of diplomacy. At one extreme, A's bid can be deflected by B in such a subtle and politely phrased way that A is left nonplussed. At the other extreme, A's bid can be rejected by B in such a rude and "in-your-face" way that A is forced to confront B's naked hostility and obvious willingness to escalate the unpleasantness of the encounter.

Thus, verbal rudeness is, for B, a tool (or, more bluntly, a weapon) that B can use to strip away the veneer of social politeness from the encounter and re-present it to A as a starkly defined contest for status, power, and "face." More specifically, verbal rudeness is a countermove that simultaneously lays bare what B perceives to be an underlying status conflict with A and escalates that conflict dramatically. Stated in its crudest terms, B's countermove of in-your-face rudeness communicates to A: "You want *me* to eat s**t? No, *you* eat s**t instead!" Indeed, B's rude attack on A's "face" is so crude, immediate, intense, and uncompromising that A's options are either to back off and retreat from the encounter or to remain engaged and risk experiencing an even more hostile response from B. Given these two unpleasant options, it is noteworthy that, according to Smith *et al.*'s (2010) Australian data, most people in the role of Person A choose to withdraw from the encounter as quickly as possible (a move in which they clearly lose some "face"), rather than to escalate it further and risk an even greater loss of "face" (Ickes *et al.*, 2012, pp. 78-9).

Because this situation is one in which individual differences in dispositional rudeness tend to be maximized, Ickes *et al.* (2012) used variants of this situation to create the content of the ten items of their RS (see Appendix 1). Then, to explore the specific traits that define the personality of the dispositionally rude individual, they conducted a study in which several personality measures were used to predict participants' scores on the RS. The results of this study, plus two additional ones (Park *et al.*, 2014), converged in showing that three traits appear to be central to the personality of dispositionally rude individuals. First, they score low in their adherence to conventional morality, believing that the moral rules that apply to others simply do not apply to them. Second, they score high in thin-skinned ego defensiveness, being highly intolerant of any criticism or correction by others[2]. Third, they score high in affect intensity for anger and aggression, becoming quickly and intensely angry at provocations that other people might consider merely annoying. In all three studies, these three personality measures collectively accounted for 25-31 percent of the variance in the participants' scores on the RS, even when controlling for other relevant variables, such as social desirability, impulsivity, aggression, narcissism, and misanthropy.

The results of these studies established a preliminary personality profile of rude individuals and provided evidence of the convergent validity of the RS. To complement these studies, the present investigation explored the behavioral validity of the RS, using both a retrospective and a prospective design. Specifically, these studies sought to establish that scores on the RS could postdict specific, real-world ugly confrontational behaviors that had occurred in the respondent's recent past, and, in addition, could predict actual rude behavior observed in a laboratory study.

Scale validation studies such as those reported here predict results that are generally commonsensical and expected, rather than counter-intuitive, because the goal of such studies is to demonstrate that the scale does indeed predict the kind of behavior it is intended to predict (Allen and Yen, 1979). Thus, in the context of scale validation research, findings indicating that the trait is reliably predictive of trait-relevant behavior are generally regarded as a virtue, rather than a fault.

Study 1

The purpose of our first validation study was to see if participants' scores on the RS would be associated with (i.e. would "postdict") their scores on a retrospective checklist measure of ugly confrontational behaviors. The participants in Study 1 completed an online survey that contained the RS as well as a checklist measure of 16 ugly confrontational behaviors[3]. This retrospective measure required participants to report how often they had engaged in specified confrontational behaviors (e.g. giving the finger to another driver, cursing at someone) during the past year (see Appendix 2). All procedures used in this study were reviewed and approved in advance by the university's Institutional Review Board.

Method

Participants

A total of 280 undergraduate students at the University of Texas at Arlington participated in Study 1 during the fall semester of 2011. The participants ranged in age from 18 to 41 ($M = 21.28$, SD $= 3.87$). They included 192 females (68.6 percent) and 88 males (31.4 percent). The sample was ethnically diverse, with 35.4 percent classifying themselves as White/Caucasian, 23.2 percent as Asian, 18.8 percent as Black/African-American, 18.6 percent as Hispanic, and 5.7 percent as other/multicultural. One participant (0.4 percent) did not report a race/ethnicity.

Procedure

The participants were recruited via the Psychology Department's online SONA System software (Fidler, 1997). This software allowed potential participants to read descriptions of available studies and sign up for the ones they selected. Once the participants had signed up for the present study, they were automatically given the web address so that they could access the survey on SurveyMonkey.com. Upon accessing the survey, the participants first provided their consent online then answered a set of demographic questions regarding their gender, race/ethnicity, and age. The rest of the survey contained the shortened social desirability scale (Strahan and Gerbasi, 1972), the RS (Ickes *et al.*, 2012), and the retrospective checklist of ugly confrontational behaviors (CUCB) (Park *et al.*, 2014). All respondents viewed the survey items in the same order and were unable to view upcoming pages or to return to change their answers to previous items.

Survey measures

The shortened social desirability scale. Strahan and Gerbasi (1972) developed a shortened 10-item version of the Marlowe-Crowne social desirability scale (Crowne and Marlowe, 1960) to assess individual differences in the tendency to answer survey questions in a socially desirable way. This measure uses a Likert-scale response format, with response options ranging from 1 (strongly disagree) to 5 (strongly agree). Some sample items from this scale are, "I am always willing to admit it when I make a mistake" and "There may have been occasions when I took advantage of someone" (reverse scored). This scale demonstrated acceptable inter-item reliability in the present sample ($\alpha = 0.70$).

The RS. William Ickes (see Ickes *et al.*, 2012) developed the RS to measure individual differences in the propensity to verbally abuse strangers who threaten one's status, power, or "face." This measure includes ten descriptions of hypothetical situations, each with four alternative responses that vary in their "rudeness points." Four sample items from the RS are provided in Appendix 1 (for all items and scoring information, see Ickes *et al.*, 2012). The RS demonstrated acceptable inter-item reliability in the present sample ($\alpha = 0.73$).

CUCB. This checklist, developed by William Ickes and Anna Park, presents the participants with a list of 16 ugly confrontational behaviors and instructs them to report how often they had performed each behavior during the last year. The response options range from 1 (no, never) to 4 (yes, often). Sample items include, "Have you cursed at someone in anger?" and "Have you deliberately hit or slapped someone in order to provoke a response?" Appendix 2 contains the full checklist. Although these behaviors are rarely expressed by most people, they appear to capture the types of ugly confrontational behaviors that are most often observed in everyday social life. This retrospective behavioral checklist demonstrated good inter-item reliability in the present sample ($\alpha = 0.87$).

Results

The data were analyzed using a multiple regression model. Our primary aim was to determine whether the respondents' scores on the RS would be positively associated with their scores on our retrospective CUCB. An additional aim was to test for any potentially qualifying effects of the

respondents' gender, race/ethnicity, and/or age. Because some participants might have been reluctant to admit to rudeness and other ugly confrontational behaviors, social desirability was included as a control variable. Two-way interactions between the RS and each demographic variable were also tested to confirm that the utility of the RS as a predictor of ugly confrontational behaviors did not depend on the participants' gender, race/ethnicity, or age.

Gender and race/ethnicity were both categorical variables; therefore, it was necessary to recode them into a format that could be analyzed using regression analyses (Cohen *et al.*, 2003). Gender was recoded using an unweighted effects code, whereas race/ethnicity was recoded using four weighted effects codes. This coding scheme is ideal when there are unequal sample sizes in each group and when the varying sample sizes are thought to be representative of the population (Cohen *et al.*, 2003).

The regression model included the following predictors: the two personality measures of social desirability and rudeness; the demographic variables of gender, race/ethnicity, and age; and the two-way interactions between rudeness and each demographic variable (rudeness $\times$ gender, rudeness $\times$ race/ethnicity, and rudeness $\times$ age). The checklist measure of ugly confrontational behaviors served as the outcome variable. The overall regression model was significant, indicating that the predictors collectively accounted for 32 percent of the variance in ugly confrontational behavior, $F(14, 256) = 8.76$, $p < 0.001$. However, social desirability, $b = -0.21$, $SE = 0.04$, $\beta = -0.26$, $t(256) = -4.97$, $p < 0.001$, $sr^2 = 0.06$, and rudeness, $b = 0.37$, $SE = 0.05$, $\beta = 0.39$, $t(256) = 6.80$, $p < 0.001$, $sr^2 = 0.12$, were the only significant individual predictors of ugly confrontational behavior when all of the remaining predictors were statistically controlled. As one might expect, people who presented themselves in a socially desirable way were less like to report engaging in ugly confrontational behaviors, whereas people who scored high on the RS were more likely to do so. These two effects were additive and independent of each other, according to the results of our multiple regression analyses.

In summary, the results of Study 1 demonstrated that scores on the RS were positively associated with scores on our retrospective checklist measure of ugly confrontational behaviors, accounting for 12 percent of the variance on this measure. In addition, the RS scores did not interact with any of the demographic variables, therefore indicating that the RS "postdicted" ugly confrontational behavior equally well for both males and females and across all sampled ages and racial groups.

Study 2

The goal of Study 2 was to behaviorally validate the RS in a prospective study that was intended to complement the findings of the retrospective study reported above. Specifically, we predicted that scores on the RS would correlate positively with the level of "retaliatory" rude behavior displayed in an online instant messaging conversation. Participants were led to believe that they were having an instant messaging conversation with another participant, but they were actually receiving scripted messages that were sent by one of the experimenters. The scripted messages were designed to attack the participants regarding their stance on one of four political topics of their choosing (abortion, immigration, healthcare, gay marriage). After the data were collected, a group of three undergraduate research assistants independently rated each participant's instant messages in terms of the overall rudeness they displayed when responding to messages that had criticized and provoked them. All procedures used in this study were reviewed and approved in advance by the university's Institutional Review Board.

Method

Participants

A total of 109 college students at the University of Texas at Arlington participated in this study during the Spring 2012, Fall 2012, and Spring 2013 semesters. Their ages ranged from 16 to 67 ($M = 20.58$, $SD = 5.23$). There were 77 females (70.6 percent) and 31 males (28.4 percent). One person did not indicate his or her sex (0.9 percent). The sample was diverse, with 31.2 percent of

the participants classifying themselves as White/Caucasian, 22 percent as Black/African-American, 21.1 percent as Hispanic, 18.3 percent as Asian, and 4.6 percent as other/multicultural. One person did not indicate a racial/ethnic identification (0.9 percent).

Measures

The RS. The RS appeared on the psychology department's prescreen survey, which is an online survey that participants typically take within the first few weeks of the semester before they sign up for any specific studies. The prescreen survey includes pretest measures that researchers wish to collect days or weeks in advance of their study sessions. This prescreening procedure reduces the chance that participants can infer the purpose of the subsequent study and therefore reduces demand characteristics.

Procedure

The participants were recruited via the psychology department's online SONA System software (Fidler, 1997), which allowed potential participants to review the available studies and sign up for the ones they selected. Up to six participants could sign up for a particular laboratory session of a study titled "Online vs Face-to-Face Communication." Each session was run by two experimenters, and each experimenter worked with the same two to three participants throughout the study. When the participants arrived at the lab, a sign on the door instructed them to wait in the hall until an experimenter came for them. Each participant was escorted into the lab at the time he or she arrived, and was asked to leave any personal items in a designated place in the main (center) part of the room. The experimenter then seated the participant in one of several small rooms that contained only a desk, computer, and chair.

The participant was informed that the session would involve an online conversation with another participant (all sessions were, in fact, online sessions, despite the cover story that the researchers were comparing online versus face-to-face conversations). The participant was told that it would take some time to set up the remaining participants in the other rooms, and that during that time they should read the consent form, and, if they chose to participate, they should go on to read the instruction sheet and then answer a one-item survey. This survey required the participant to choose a specific topic of interest for their online discussion (abortion, immigration, healthcare, or gay marriage). When the experimenters left the participants in their individual rooms, they left each door slightly ajar, so that the participants could hear, but not see, what was going on in the main room.

The instruction sheet informed the participants that they would be discussing a current political topic with another participant via AOL Instant Messenger. The instruction sheet described the roles of Person 1 and Person 2 in the conversation: Person 1's instructions were to initiate the conversation by writing and sending their first instant message containing their own thoughts and feelings regarding the political topic they had chosen. After sending their first message, they would wait for Person 2 to respond and the online conversation would then go back and forth. In reality, all participants were assigned the role of Person 1, but including both sets of instructions served to make it more believable that the participant would be interacting with another participant. Although Person 2 was actually one of the researchers, the instructions for the Person 2 role were to wait until receiving the first message from Person 1; then respond by detailing their own thoughts and feelings about the topic that Person 1 had chosen; and then the conversation could continue from there. The instructions for both Person 1 and Person 2 indicated that they should send five separate instant messages.

Each participant was given a one-item survey that stated, "Please choose the ONE issue which you believe is currently the most important in the US," and had the following four response choices: abortion, immigration, healthcare, gay marriage. Pilot testing of various political topics revealed that these four issues were the ones for which people had the strongest feelings. The participants were allowed to choose their own topic to help ensure that they had formed an opinion about it and would be able to discuss it with a stranger.

After the participants were given their consent document, instruction sheet, and topic survey item, they were left in their respective rooms for ten minutes. During this ten-minute period, the

experimenters periodically announced in a loud voice that one participant had still not arrived and that the study would start once this person had arrived. The computers were locked during this period so that the participants could not use them.

Because they were unable to use the computer and did not have access to their personal belongings, this wait period was intended to mildly frustrate the participants and therefore make instances of rude behavior more likely to emerge in their instant messages. Just before the ten minutes had elapsed, the researchers pretended that the late participant had arrived by saying loudly, "Oh there you are, just put your things here and follow me." To make this event more believable, the experimenter actually opened the door of an empty room and simulated seating and providing instructions to a newly arrived participant.

The experimenters then went to each participant and collected their consent document and opened their instant messaging screen on the computer. In a quiet voice, they told the participant that they had been randomly assigned to be Person 1 and that the issue they had chosen on the topic survey would be the topic of their conversation with another participant. They were told that they could begin typing their first message and should tell their conversation partner (Person 2) what topic they would be discussing and where they personally stood on this issue. They were told to send their first message only when the experimenters announced that everyone had been given instructions and were ready to begin. Once these instructions had been given to all participants, the researchers returned to their own computers in the main room and said, "Okay, for those of you who are Person 1, you may send your first message."

The researchers received the messages from the participants and responded to each one using four scripted responses. These responses were designed to be vague enough that they could seem like a plausible reply, regardless of the content of the participant's messages. After receiving the first message, the researcher responded with the first reply listed below and then they waited their turn and went through the additional replies one at a time until the participant had sent a total of five messages. The replies to Person 1's (first four) messages were as follows:

1st reply: I can't understand how you could feel that way about (insert *abortion, immigration, healthcare, gay marriage*). It sounds to me like you don't know much or have not thought much about this issue.

2nd reply: Do you even think for yourself? I bet you're the type that lets others think for you and just repeats what you have heard.

3rd reply: What are you, stupid, or are you a freshman?

4th reply: Whatever. I don't even want to have this discussion with someone like you.

Once the participants had each sent their fifth message, the researchers went into each room and asked the participant, "Have you had a chance to send all five messages yet?" They then probed for suspicion by asking the participants what they thought the study was about and if there was anything that they thought the researchers were not telling them[4]. The participants were then thanked and debriefed at the same time in the main part of the room.

Behavioral coding

Three undergraduate research assistants reviewed the instant messages that were sent by the participants (i.e. the scripted responses were removed and the research assistants saw only the participants' messages). The research assistants rated the overall degree of rudeness that was evident in the instant messages the participants sent using a four-point scale ranging from (1) not rude at all, (2) slightly rude, (3) very rude, and (4) extremely rude.

A two-way mixed intraclass correlation coefficient (ICC) was calculated to determine the reliability of these rudeness ratings. The agreement among the three raters was reasonably good, given the subjective judgments required, $ICC(3, 109) = 0.73$.

Results

Multiple regression analyses were conducted to analyze the data. It was necessary to use different regression models because the sample size did not allow for simultaneous testing of all

the main and interaction effects. Our primary aim was to determine whether scores on the RS would predict the degree of rudeness that was displayed in the participants' instant messages. A secondary aim was to determine whether this effect was general across the variations in gender, race/ethnicity, age, and issue topic.

Gender, race/ethnicity, and issue topic were all categorical variables; therefore, it was necessary to recode them before conducting the data analyses (Cohen *et al.*, 2003). Gender was recoded using an unweighted effects code, whereas race/ethnicity and issue topic were each recoded using three weighted effects codes.

Our first regression model tested the main effects of gender, race/ethnicity, age, issue topic, and scores on the RS as predictors of how rude the participants' instant messages were rated. The overall model was significant, indicating that the five predictors accounted for 22.2 percent of the variance in perceived rudeness, $F(9, 92) = 2.92$, $p = 0.004$. However, the RS was the only significant individual predictor of how rude the participants' instant messages were rated, $b = 0.33$, $SE = 0.11$, $\beta = 0.30$, $t(92) = 3.02$, $p = 0.003$, $sr^2 = 0.08$. Gender, race/ethnicity, age, and issue topic were not significant predictors of perceived rudeness when the effect of the RS measure was statistically controlled.

The next step was to test two-way interactions between scores on the RS and each demographic variable, as well as the two-way interaction between scores on the RS and the issue topic. Ideally, the RS scores would predict rude messages equally well across males and females, across all racial groups, across all ages, and across all issue topics. Each interaction was tested in a separate regression model. That is, each regression model contained the two first-order terms, as well as one two-way interaction (all continuous variables were centered before conducting the analysis). The results revealed no significant two-way interactions, suggesting that the utility of the RS as a predictor of rude messages did not depend on the participants' gender, racial/ethnic group, age, or issue topic.

In summary, scores on the RS uniquely predicted the degree of rudeness in the instant messages the participants sent in response to the "other participant's" criticism and provocation. High scores on the RS were associated with higher ratings of rudeness in the content of the instant messages, and this effect was not qualified by the variables of gender, racial/ethnic group, age, or issue topic.

Discussion

Previous studies using the RS established its convergent validity by showing that intentional confrontational rudeness is related to a disregard for conventional morality, a tendency to experience intense anger and frustration, and thin-skinned ego-defensiveness. The purpose of the present studies was to demonstrate the behavioral validity of the RS by establishing its ability to retrospectively postdict previously-enacted ugly confrontational behavior (Study 1) and to predict actual rude behavior in response to a stranger's criticism and provocation during an online interaction (Study 2). The data supported the behavioral validity of the RS in both our retrospective study and our prospective study, and showed that the RS's ability to predict rude behavior did not depend on gender, race/ethnicity, or age. These findings suggest that the RS is a valid measure that predicts rude behavior across the most basic socio-demographic categories.

In a specific example that is drawn from Study 2, a participant who had a high RS score sent the phrase, "You're clearly an a*****e" in an instant message to their online partner. Examples like this suggest that high scores on the RS might be used to identify individuals who have a propensity to "act out" in offensive and confrontational ways. Similarly, the Study 1 data suggest that such individuals are likely to have "acted out" in the past as well as in the present, and to have already acquired a history of intentionally rude and confrontational behavior.

These findings have important implications for research and application. As a research instrument, the RS can be used to measure individual differences in the propensity to verbally abuse strangers in response to unexpected challenges or criticism. Researchers can, for example, use the RS in longitudinal prospective studies as a periodic outcome measure to

determine which developmental and environmental variables (e.g. temperament, history of parental aggression and/or peer-victimization, media exposure to violence) predict the emergence of verbal rudeness.

On the other hand, before clinicians can use the RS to diagnose the potential for clinically significant rudeness, appropriate diagnostic cut-off points should first be established. For two reasons, we were unable to do this in the present studies. First, the relationship between scores on the RS and our aggregated measures of rude behavior was clearly and uniformly linear in both of these studies, with no hint of a curvilinear inflection or discontinuity that would identify where a clinically significant level of rudeness begins. Second, our participants were college students who had not been evaluated by mental health professions for any type of pathology associated with offensive and highly confrontational behavior.

We therefore recommend that clinicians establish the appropriate cut-off points for "clinical rudeness" by comparing the average scores on the RS obtained by first, clinical samples of people who have been diagnosed with either Oppositional Defiant Disorder (ODD) or Antisocial Personality Disorder (APD) with those obtained by second, non-clinical matched control individuals[5]. Cut-offs that optimally separate the clinical groups from the matched controls could be used provisionally in clinical diagnosis, and then further refined as more data become available.

The viability of this approach is suggested by the results of two studies (Harty *et al.*, 2009; Salekin *et al.*, 1997) in which individuals who scored higher on the Antisocial Subscale of the Personality Examination (A-PDE; Loranger, 1988) and adolescents diagnosed with ODD were characterized by significantly higher levels of verbal aggression than either individuals who scored lower on the A-PDE or adolescents from a non-clinical control group. Future research should examine whether these populations also score higher on our retrospective checklist measure of ugly (and intentional) confrontational behaviors.

Strengths and limitations of the present studies

The present Study 1 and Study 2 each addressed the other study's major limitation. Because Study 1 was retrospective, it relied upon the participants' ability to remember and report their own ugly confrontational behaviors during the past year. Study 2 addressed this limitation by using scores on the RS to predict actual rude behavior in a prospective investigation. On the other hand, Study 2's findings were limited to a single online discussion between strangers, whereas Study 1's findings generalized to a wide range of ugly confrontational behaviors that were directed toward various people in various real-life settings. The present studies therefore complement each other in illustrating the predictive validity and applied potential of the RS.

A few remaining limitations of the present studies should be noted. First, both studies relied upon college-student samples. However, because this population is generally both well-socialized and well-educated, one could argue that confrontational rudeness should be less likely to occur in these individuals than those drawn from less selective samples. It is encouraging, therefore, that the present findings emerged under what were probably less than ideally facilitative conditions. Nevertheless, the generality of the present findings should be determined in studies that sample from more diverse populations.

A limitation that applies specifically to our second study is that it was conducted through online instant messaging and not face-to-face. Because the participants could not see who they were "paired with" for this online discussion, their relative anonymity might have facilitated the expression of rude communications that may or may not occur in a face-to-face encounter[6]. It is important to remember, therefore, that the RS not only predicted rude behavior in the laboratory in Study 2, but also postdicted a wide range of ugly confrontational behaviors that occurred in the participants' everyday lives over the past year.

To return to a theme that we noted in the introduction to this paper, rude and confrontational social behavior is an important and increasingly evident problem in contemporary life, as indicated by its tendency to affect the cognition, performance, and interpersonal behavior of both the victims and the witnesses of this behavior. Attempts to create a more civil society may depend

upon the ability to identify rude individuals early in life and to intervene in ways that will put their lives on a better track. We suggest that research using the RS may have an important role to play in these efforts.

Notes

1. In all cases in which asterisks are used within profane words, they have been put there by the journal's copy editor and did not appear in the original text or in any of the items of the Rudeness Scale.

2. Consistent with this feature of the dispositionally rude individual's personality, there is evidence that child bullies and abusive husbands readily perceive criticism and challenges where others do not and are "thin skinned" in their response to it (Dodge and Coie, 1987; Robillard and Noller, 2011; Schwartz and Dodge, 1998; Schweinle and Ickes, 2007; Schweinle et al., 2002).

3. Although both of these measures were included in the second study reported by Park et al. (2014), the ability of Rudeness Scale scores to predict scores on the Checklist of Ugly Confrontational Behaviors was not reported in that study. The present paper is the first to test and report that relationship.

4. About 20 of the 109 participants indicated some degree of suspicion. However, when questioned further, none of these participants was able to explain the true nature of the study or identify any of the specific ways in which the researchers had used deception. Moreover, because removing the data for these individuals from the data analyses left the results essentially unchanged, we found no compelling reason for deleting their data from the analyses reported below.

5. Or with both – longitudinal studies suggest that childhood ODD is a developmental precursor to Conduct Disorder (CD), and, in turn, that CD is a developmental precursor to adolescent APD (Burke et al., 2010).

6. Relevant to this point is recent evidence that individuals who are intentionally disruptive online also tend to be contentious and trouble-making "trolls" in real life (Buckels et al., 2014).

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Further reading

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Appendix 1. Sample items from the RS

Please read each of the following items and then choose the alternative that best describes how you would respond if you were in the situation described. Different people would react in different ways, so please be honest about what your own reactions would be in the following situations.

1. You are driving in a shopping mall parking lot, looking for an empty parking space. A woman is driving toward you from the opposite direction with her left-turn indicator blinking. When you see an empty parking space on your right and pull into it, the woman rolls down her

window and says "That's *my* space; I was signaling to turn in there!" Which of the following would be your most likely response?

    a. I would say, "Too bad, but I got here first." (3)

    b. I would say, "F**k you, it's my space now." (4)

    c. I would say, "I'm sorry, let me back up so you can have it." (1)

    d. I would park the car and walk off without saying anything. (2)

2. You are at a public event wearing a T-shirt with a slogan that some people might find offensive. A woman with two small children comes up to you and tells you that you shouldn't be wearing that shirt at "a family-oriented event." Which of the following would be your most likely response?

    a. I would make no response whatsoever. (2)

    b. I would apologize to her. (1)

    c. I would tell her that *she's* the one who's being offensive. (3)

    d. I would tell her to f**k off and leave me alone. (4)

3. You are sitting in a coffee shop, talking on your cell phone to a friend. When your friend tells you about something really bad that just happened, you say "F**k! I can't believe it! That is really F****d up!" At that point, one of the customers—an elderly lady—tells you to "Watch your language!" Which of the following would be your most likely response?

    a. I would tune her out and keep talking to my friend. (3)

    b. I would interrupt the phone conversation to apologize to her. (1)

    c. I would tell her that my phone call is none of her f*****g business. (4)

    d. I would step outside and finish my phone conversation there. (2)

4. You go out to eat and take the last available parking spot. When you come back out after finishing your meal, a man is standing by your car who chastises you for parking in a space marked "Handicapped Drivers Only." Which of the following would be your most likely response?

    a. I would tell him to f**k off. (4)

    b. I would ignore him completely. (2.5)

    c. I would tell him to mind his own business. (2.5)

    d. I would apologize to him. (1)

*The numbers in parentheses are the "rudeness points" for each of the alternatives for a given item.

Appendix 2. Checklist measure of ugly confrontational behaviors

The following questions concern experiences that you might, or might not, have had with other people during the past year. Please read each question carefully and then choose the response that best describes your own experience. There are no right or wrong answers, so please describe your own experiences as honestly and accurately as possible. You are free to decline to answer any question, though declining to answer is considered a response.

Response options:

 a. No, never

 b. Yes, once

 c. Yes, more than once

 d. Yes, often

1. Have you yelled at a person you were having an argument with?

2. Have you hung up on someone out of anger?

3. Have you insulted or belittled a person to their face?

4. Have you sent someone an angry email or text?

5. Have you cursed at someone in anger?

6. Have you threatened anyone with violence?

7. Have you visibly given the finger to another driver?

8. Have you shoved a person out of line who had cut in front of you?

9. Have you gotten involved in a shouting or screaming match in a public situation?

10. Have you gotten involved in a fistfight or "catfight" in a public situation?

11. Have you deliberately bumped a person or his or her vehicle with the bumper of your car as a way of expressing your anger for that person?

12. Have you publicly yelled at a store clerk or restaurant employee to express your dissatisfaction?

13. Have you shouted at someone to get out of your way?

14. Have you deliberately hit or slapped someone in order to provoke a response?

15. Have you spit on or at someone in order to express your contempt?

16. Have you deliberately "keyed" or in some way damaged another person's car, truck, or van?

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