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Interpersonal Cognitive Complexity and Cross-cultural Dating:  
An Application of Personal Constructs Psychology

Jennifer Gelar

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Dennis Jennings, Ph.D.  
Thesis Chair

---

Howard King, Ph.D.  
Committee Member

---

Karen Swallow Prior, Ph.D.  
Committee Member

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James Nutter, D.A.  
Honors Director

---

Date

Abstract

The purpose of this study is to investigate interpersonal cognitive complexity, which is an individual difference variable describing a person's cognitive system, and its role in cross-cultural relationships, particularly Caucasian-American males' willingness to date a woman from another country. This study is an application of Personal Constructs Psychology and employs Crockett's Role Category Questionnaire to tap into participants' levels of social perception through the investigation of interpersonal cognitive complexity scores.

Interpersonal Cognitive Complexity and Communication in

Cross-cultural Dating: An Application of Personal Constructs Psychology

Consequent to the growth of multiculturalism and the global community is the escalation of cross-cultural romantic relationships. While the differing attitudes and motivations behind these relationships have sparked the interest of many researchers, experts agree that there is much work to be done, markedly in the area of communication. As experts have found, research on communication in intercultural romantic relationships is restricted and it still in its infant stages (Cools, 2006; Harris & Kalbfleisch, 2000). Relationship studies show that communication problems are the most frequently cited difficulty between couples (Burleson & Benton, 1997). In addition, cross-cultural couples tend to experience more obstacles and challenges in their relationship compared to their intra-cultural counterparts (Troy, Lewis-Smith, Laurenceau, 2006). Thus, the focus of the present study is appropriately on the communication process of intercultural romantic relationships. An effort to reach a better understanding of how cross-cultural communication in romantic relationships actually transpires may shed light on potential key ideas that may help reduce difficulties in romantic cross-cultural communication.

The multicultural society requires psychologists to possess sufficient understanding of how cross-cultural relationships and communication development relate to each other. In cross-cultural communication, beyond the mere accounting and describing of various topics that emerge in intercultural relationships (e.g., raising children, female-male roles) are complex cognitive processes that individuals are not always conscious about. In psychology one's cognitions truly influence one's behavior or

experiences and vice versa. The present study aims to investigate cognitive factors that may hold some influence in cross-cultural dating.

Burleson and Denton (1997) addressed the four complex processes of communication that are involved in each communication context: “message production, message perception, coordinated interaction and social perception” (p. 888). Rather than relying on broad communication concepts such as “communication skill” or “verbal and nonverbal skills,” they suggested that a focus on fine distinctions within the four communication processes will yield more productive results. Thus, the concentrated focus on social perception is appropriate.

Relational communication of intercultural couples is complicated because each partner comes into the relationship with his/her own sets of habits, rules, and viewpoints as well as different ways of relating to one another and different ways of solving differences (Cools, 2006). Through the stages of interracial relationship development, these differences need to be addressed. Foeman and Nance (2002) named these four stages as “racial awareness, coping, identity emergence and maintenance” (p. 238). An investigation of these stages exposes a variety of obstacles that demand application of acute social perception. For example, in the first stage of racial awareness alone, the individuals in cross-cultural dating relationship must address social frames for the attraction. They must also determine how to tell significant others that may disapprove of their involvement in a romantic cross-cultural relationship. In this first stage, the individual must already manage the awareness of the new role of race/culture. The attraction then stems into sensitivity or the “growing concern one partner feels to the other’s racial experience” (Foeman & Nance, 2002, p. 240). So those involved in a

cross-cultural romantic relationship develop a sense of racial sensitivity otherwise unattainable in a single race relationship.

Social perception skills also play a crucial role in cross-cultural dating relationship, for individuals must constantly overcome many psycho-social barriers. The difference between in-group and out-group communication is that there are few psychological barriers present in in-group communication, but perception and interaction expectations hold greater significance in out-group communication (Harris & Kalbfisch, 2000).

In a study on communication and marital satisfaction, Burleson and Denton (1997) tapped into social perception skills by employing interpersonal cognitive complexity measures. Cognitive complexity is reported to be “moderately to strongly associated with several social perception skills including forming and remembering highly organized impressions, integrating potentially inconsistent information and social perspective-taking ability” (p. 891). Cognitive complexity operates within the framework of Personal Constructs Psychology. Developed by George Kelly in the 1950s, Personal Constructs Psychology (PCP) examines how individuals develop systems of bipolar constructs as a means to understand and anticipate social experience (Niemeyer & Niemeyer, 1986). PCP is argued by O’Keefe and Sypher (1981) to be “an important determinant of sophisticated interpersonal functioning” (p. 72).

Burleson and Denton (1997) used Crockett’s Role Category Questionnaire (RCQ) in their assessment of social perception processes, which they described as a “powerful index of social perception skill because it taps the individual’s capacity to acquire information about another and apply that information effectively in the service of

interactional goals” (p. 898). This study applies Crockett’s Role Category Questionnaire (RCQ), an interpersonal cognitive complexity measure, to the context of intercultural dating.

## Literature Review

### *Intercultural Relationships*

Many factors play into the acceptance of interracial relationships. Many studies have shown that the exposure level to other cultures is a determining factor to openness in accepting intercultural relationships. A research study found that among the respondents who have been involved in romantic intercultural relationships, 92% of them show willingness to repeat the experience (Knox, et al., 2000). Among males, those who are younger and have lived in interracial neighborhoods or have attended interracial schools are more likely to inter-culturally date (Yancey, 2002; Troy, Lewis-Smith & Laurenceau, 2006). Intercultural dating also happens more frequently in the university setting. The increasing number of minorities enrolling in colleges has been a factor in the rise of interracial dating (Reiter, Krause & Stirlen, 2005).

Research studies based on personality theories show that those who score highest in Openness to Experience in the Five Factor Model of personality are found to be more accepting of interracial relationships than those who scored highest on authoritarian forms of personality. Individuals who tend to exhibit more generalized prejudice often report to have factors of the authoritarian personality such as aggression, conventionalism, toughness and power (Flynn, 2005).

Several theories have unique views on the individual’s willingness to date cross-culturally. For example, the racial motivation theory holds that individuals become

involved in such relationships because an individual from a different culture appears unique and is reported to have more appeal. Structural theory, on the other hand, states that interracial relationships come about because of the couples' similarities in demographics, status, occupation and mutual attraction, which all lead to the initiation of the relationship (Harris, 2000).

Varying attitudes surround intercultural relationships. Men and women seem to hold opposite attitudes. Men are more likely to have positive attitudes, while the opposite goes for women. The younger generations are also more positive than the older generations, as well as Caucasians more than their black counterparts (Todd, 1992; Harris, 2000; Yancey, 2002). However, other studies show that white Americans are significantly least likely to date inter-culturally (Yancey, 2002). Also, more black women than white women believe that romantic intercultural relationships are "threatening to their personal and racial welfare" (Todd, 1992, p. 53). Younger black women are among the most negative, for they feel that intercultural relationships leave them deprived of respectable black men. Their own involvement in intercultural relationship also makes them feel that they are letting their ethnic group down, and many harbor distrust in white men's intentions. Furthermore, older white women tend to be unwilling to date outside their race.

Religion is another important factor to consider in how individuals view intercultural relationships. It seems that those who resist interracial dating are also likely to resist racial integration. This attitude may be rooted in philosophical and or religious beliefs against racial mixing. Evidence shows that "conservative religious beliefs have historically held theological beliefs that prohibit racial exogamy" (Yancey, 2002, p. 181).



One example is that some conservative Christians argue that interracial dating is sinful.

However, current trends concerning interracial dating show that conservative Protestants are “uncomfortable with this prohibition” (p. 181). Roman Catholics may also avoid intercultural relationships, but resistance is not always intentional.

### *Intercultural Communication in Dating Relationships*

Communication in an intercultural context is more complex and is often laden with anxieties and expectations. For this reason, out-group communication strategies potentially become more accentuated as communicators need to adapt communication to varying expectations and perceptions (Harris & Kalbfisch, 2000).

Foeman and Nance (2002) stated that the challenge for intercultural daters is to devise strategies, such as identity flexibility, without demeaning their cultural values. Intercultural communication shapes the relationship between the intercultural couple and culture. The four stages of intercultural relationships are as follows: “attraction, coping, reframing and maintenance” (p. 238).

The attraction phase has been described as an interpersonal and cultural experience because individuals now must adjust their social frames to manage the attraction they have for someone of a different culture. They also become more aware of the new role of race in their lives and develop an increased sensitivity of their partner’s social place. In this phase, individuals begin to filter in-group talk through the experience of the significant other. The challenge to reconcile differing worldviews and cultures begins to emerge in this phase (Foeman & Nance, 2002). The individual’s communication patterns also begin to change (Harris & Kalbfisch, 2000). Intercultural

couples, in order to achieve communication goals, negotiate who they are over time and in a changing context (Thomas & Collier, 2006).

The coping stage follows attraction. In this stage, individuals learn how to integrate a new found racial sensitivity to their day to day lives. While partners coming from different background need more time to work through their attraction, they are also potentially pushed to a deeper commitment than intended when their friends and family criticize their choices. In response to the criticism and negativity around them, intercultural couples tend to draw together to learn how to combat assaults. The couple's response is insulation or negotiation. They insulate from potentially harmful people or situations, and negotiate threatening situations and turn to each other.

Following the coping stage is rethinking and reframing of identities (Foeman & Nance, 2002). In this stage, individuals involved in interracial relationships may undergo identity adjustments. Luke and Carrington (2000) stated that individuals involved in this type of relationship are missing out on group cultural identity for they must renegotiate their cultural identity when they participate in activities that take them outside of the standards of their own culture. The reconfiguration of identities in intercultural relationships are often unexpected by either partner.

Identity flexibility is important to achieving effectiveness in intercultural communication (Berger, 2005). Harris and Kalbfeisch (2000) stated that racial and cultural identities influence the communication process. According to Orbe's co-cultural theory, intercultural communication is said to be influenced by six factors: (1) "preferred group outcome for the relationship;" (2) "field of experience;" (3) "abilities, which refers to a person's skill at using different communication practices;" (4) "situational context,

which involves the influence of setting;” (5) “perceived cost and rewards;” and (6) “communication approach, wherein a person chooses the appropriate communication strategy” (p. 51). The strategy used for each intercultural interaction varies depending on the communicator.

Maintenance is the final state in the development of intercultural relationships. This stage defines the success of intercultural relationships. How the couple creatively and skillfully manages many competing images within their mind, with each other, and the outside world determines the survival of the relationship. The progression of the stages suggested by Foeman and Nance (2002) – racial awareness, development of new coping strategies, emergence as a reconstructed unit and ongoing relationship maintenance – is not always smooth and orderly. Partners may enter the intercultural relationships from different beginning points. For example, if one partner has already been in an intercultural relationship in the past, he or she may have already addressed several issues that need to be revisited with a new partner. Overall, throughout the development of intercultural relationships, “communication shapes and reshapes the relationship between couple and culture” (p. 238).

In their qualitative study on intercultural relationships, Thomas and Collier (2006) found that their interviews with cross-cultural couples focused on the importance of and need to protect the relationship. In response to debate on racial issues, intercultural couples prioritize their similar commitment and assert the idea that there is no need to think about racial differences.

According to adaptation theories, the individual’s identity evolves from a monocultural identity to a more intercultural identity as experience with intercultural

communication increases. The extent of one's intercultural communication experience leads to psychological change as constructs become more individuated and categorized. (Berger, 2005). Research studies have found that interethnic daters are more willing to engage in a variety of intergroup relationships and exhibit less prejudice and lower ethnic identification (Levin, Taylor & Caudle, 2007).

### *Interpersonal Cognitive Complexity*

Constructivist Psychology holds that individuals use constructs to understand their social world. Personal constructs make up the basic cognitive structures through which an individual understands, anticipates, evaluates, and interprets aspects of the world around them. So constructs that are related to the qualities of other persons, such as their thoughts, behaviors, and characteristics, form a subsystem of interpersonal constructs. (Burleson & Waltman, 1988).

Cognitive complexity is an individual difference variable that describes a person's social-cognitive system. First introduced by Bieri after George Kelly's publication on Personal Constructs, complexity is the differentiation of the individual's construct system. That is, the relative number of different dimensions of judgment used by a person. Complexity and differentiation are sometimes used interchangeably (O' Keefe & Sypher, 1981). The differentiation or the number of interpersonal constructs in an individual's construct system and the quality of those constructs (e.g., abstractness, comprehensiveness) largely determine that person's communicative functioning. (O'Keefe & Sypher, 1981; Kim, 2005; Burleson & Denton, 1992). Persons who are "complex" are better able to form listener-adapted messages and achieve their communication goals (Kim, 2005; Burleson & Denton, 1992). Numerous researchers use

cognitive complexity measures, such as the RCQ, to explain variation in the effectiveness of individuals' messages (Kim, 2005). The logic behind cognitive complexity measures is that the number of constructs a subject uses should reflect the number of constructs in that subject's construct system. In other words, an individual uses only the constructs available in his or hers cognitive system (O'Keefe & Sypher, 1981).

Cognitive complexity is mostly concerned with interpersonal perceptions because it taps into how individuals code, retrieve, and use social information in their production and interpretation of messages (Waltman, 2002). It is categorized under cognitive theories in communication, and under message production theories (Kim, 2005; Waltman, 2002). Interpersonal cognitive constructs are influenced by one's socialization, and differences in development leave individuals with more complex systems than others. So an individual's construct system proceeds from a state of simplicity in childhood to become increasingly differentiated, abstract, and organized. Chronological age is positively related with cognitive complexity score across childhood and adolescence, but remains relatively stable in adulthood (O'Keefe & Sypher, 1981; Burles & Walton, 1988).

In an interview, Constructivist theorists Delia, Burleson and Applegate stated that cognitive complexity does not simply develop by maturation, but instead depends on the kind of experiences that individuals undergo. As individuals remain open, new experiences shape and reshape their cognitive constructs making them more organized as a result (Griffin, 2006, track 17). Burleson interprets RCQ scores over 25 as a reliable indicator that an individual has a high level of interpersonal cognitive complexity.

Among college students, about 70% usually score between 15 and 25 with a mean of 20

(Griffin, 2006). Applegate claimed that high scorers typically put “great emphasis and weight to the relational and identity issues present in communication.” High scorers are also likely to be perceived as accepted by peers. Low scorers, on the other hand, are usually constrained by rule-based communication and are less able to form multifunctional messages (Griffin, 2006, track 17).

A comprehensive and reliable system for content analysis of personal constructs was recently developed. Neimeyer and Geldschlager (2002) categorized constructs into 45 content categories, divided into six basic areas: “moral, emotional, relational, personal, intellectual/operational, and values/interests” (p. 3). Possible supplemental areas of existential and concrete categories are also included in the Classification System for Personal Constructs. Out of all Cognitive Complexity measures, Crockett’s RCQ is most often employed because it satisfies reliability and validity criteria (O’Keefe & Sypher, 1981).

Although the RCQ is most favored, it is not without imperfections. Some researchers claim that the RCQ lacks face validity because the process, in which subjects participate in a free-description task of a liked peer and a disliked peer, seems to be unnatural, especially with the participants having to work within the time limit (Allen, Marby, Banski & Preiss, 1991). Burleson and Waltman (1988) reported that a study with its subjects completing both timed and untimed versions found that although participants produced a higher number of constructs in the untimed version, there is a high correlation between the number constructs in the two conditions ( $r=.84$ ). The results suggest that there is “little practical difference” between two versions because the absolute number of constructs, as opposed to relative, is rarely a concern (p. 6).

In a cognitive editing experiment, researchers investigated RCQ scores for the two-role version, which is comprised of written impressions of a liked peer and a disliked peer. While the typical procedure is to use the sum of both impressions as the score, in this investigation, researchers used the liked and disliked scores separately. The report of their investigation shows that “the relationship with the dependent measure was positive for one description and negative for the other” (Allen, Marby, Banski & Preiss, p. 122). In this report, researchers questioned the construct validity of the RCQ. They argued that since the results of the investigation raises an issue against the assumption of additivity, which holds that observer coding must match with the “actual internal representation of the person,” then the RCQ lacks construct validity (p. 121).

Their question against RCQ’s construct validity is answered by Crockett’s own familiarity hypothesis, which holds that individuals apply more personal constructs to “liked” acquaintances than to “disliked” acquaintances. Crockett assumed that individuals apply more complex constructs to acquaintances that they frequently and intimately interact with (Adams-Webber, 2000). It is safe to assume that individuals’ interactions with their liked acquaintances are more frequent and intimate than their interactions with disliked acquaintances. The familiarity hypothesis seems to explain the issue in construct validity that the skeptics raised.

Overall, the RCQ is said to be a convenient and economical tool to get a general reading of possible relationships between the development of construct systems and other variables of interest (O’Keefe & Sypher, 1981). It is a simple, yet powerful procedure that gives a sample from the individual’s construct system (Griffin, 2006, track 17).

In summary, the rapid growth of cross-cultural relationships in today's society requires researchers to give attention to the matter and to have a good understanding of how they develop. Various studies on cross-cultural relationships that have been reviewed earlier show that cross-cultural dating happens most often in university settings and that among the many demographics examined, young Caucasian males are among those that possess the most positive attitudes towards cross-cultural relationships.

In addition, the progression of cross-cultural relationships relies heavily on the individual's communication strategies, as one has to constantly manage and adjust social frames, reconcile differing worldviews and endure identity flexibility that cross-cultural relationships require. Individuals are required to adapt communication to varying expectations and perceptions when participating in cross-cultural communication. The RCQ is an important cognitive complexity measure that taps into an individual's interpersonal construct system, which forms the foundation of basic cognitive tasks such as evaluating, interpreting and perceiving one's social world. A score of 25 or higher in the RCQ is said to be a good indicator of high cognitive complexity.

This study then uses the RCQ to measure the level of cognitive complexity of white Caucasian males in a university setting to find the answer to the following research question: How do levels of interpersonal cognitive complexity correlate with the individual's willingness to date cross-culturally?



## Method

### *Participants*

Participants were 60 white American males from a university in the Southeastern United States who were assumed to be fluent in English. Since each subject was required to produce two paragraphs to be analyzed for content, bigger sample size was not feasible within the time allotted for the study. Participants were college-aged, ranging from 18 to 24. Since the tool used (RCQ) is most reliable with adult subjects, those who were younger than 18 years old were not included in the study in order to control for chronological age effects. Foreign and minority populations were also excluded from the study to eliminate extraneous influence of marginalization experience on interpersonal cognitive complexity (RCQ) scores. Females were excluded from the study because their RCQ scores are consistently higher than males'. Minimal variation in scores is optimal in this study in order to pinpoint cognitive variable effects. Participants who lived outside of the United States were excluded from data analysis to eliminate further extraneous influence on social perception.

Subjects were recruited through word of mouth, advertisements on an online net working site, posters around campus, distribution of flyers, in-class and e-mail announcements and through hired recruiters. Those who were enrolled in Psychology classes received class credit for participating. Cash prizes, gift cards, free pizza and drinks were also used as incentives.

### *Materials*

*Crockett's Role Category Questionnaire.* A two-role version of Crockett's RCQ was used to assess levels of interpersonal cognitive complexity. As O'Keefe and Sypher

(1981) stated in their study of cognitive complexity measures in relation to communication, the logic of RCQ is that “the number of constructs a subject uses in the free-description task should reflect the number of constructs in the subject’s construct system” (p. 75). Also reported in their study is the RCQ’s independence from extraneous influences such as verbal ability and intelligence. Several independent assessments of verbal intelligence, verbal fluency, writing speed, vocabulary, intellectual achievement, and intelligence are unrelated to RCQ score with non-significant correlations in the range of -.20 to .25. RCQ scores are independent from general personality traits (Burleson & Walton, 1988). A more recent study on talkativeness and construct differentiation lends support that they are unrelated with  $r=0.09$  (Angell, 2000). Four-month test-retest reliability of the RCQ is reported to be .95 (Adams-Webber, 2001). Cognitive complexity is relatively stable in adulthood (O’Keefe and Sypher, 1981). Inter-rater reliability for RCQ-based complexity scores commonly exceeds .90 (O’Keefe & Sypher; Burleson & Denton; Adams-Webber).

### *Procedure*

Upon agreement, subjects were tested by the same experimenter who was blind to the hypothesis of the study (Adams-Webber, 2001). Four testing sessions in a span of five days were held for convenience, and participants chose to attend one session out of the four. The study was conducted in a medium-sized university classroom to control for testing environment effects, and all sessions were held at night at 6:00 p.m. and 7:00 p.m. Informed consent was obtained from all participants, and confidentiality was guaranteed, followed by a demographic questionnaire.

Subjects were then given a task that included pictures of two women who were matched in level of attractiveness. This was determined when a Psychology class rated ten different pictures, and two scores with matched sum, mean and median were extracted to be used for the experiment. Both women in the pictures were Caucasians, varying only in their country of origin, as indicated in the profiles for the participants to know. One woman was described as an American and the other as Russian. In order to further eliminate effects of attractiveness between the two pictures, the profiles were counterbalanced. In profile A the picture on the right was indicated to be American and the picture on the left was indicated to be Russian. In profile B, the picture on the right was indicated to be Russian and the picture on the left was indicated to be American. For every session, half of the participants randomly received profile A and another half randomly received profile B.

Participants were asked to rate their willingness to date each of the two women. A four-point Likert scale was used, from Strongly Agree to Strongly Disagree. The first statement stated, "I am more willing to date the American more than the Russian," followed by a counterbalanced statement, "I am more willing to date the Russian more than the American."

A two-role version of the RCQ was employed, which asked the subjects to hand write impressions of a liked peer and a disliked peer. Standard instructions were given for each session, requiring participants to "think of someone whom you know well and like (dislike), then list as many characteristics as you can. Pay particular attention to this person's habits, beliefs, ways of treating others" (O'Keefe & Sypher, 1981; Meyer,

1996). Participants were given five minutes to complete the role description for a well-known liked peer, and another five minutes for a well-known disliked peer.

Construct differentiation was analyzed for each role description. That is, the number of different constructs used to describe each target person is counted, such as words describing personality and behavior (e.g., “domineering,” “wants to succeed”). Only psychological, motivational and dispositional qualities were taken into account. Physical descriptors, specific behaviors and demographic characteristics were not included (Burleson & Denton, 1988). The subject’s total score was the sum of the two role descriptions, with higher scores indicating higher cognitive complexity (O’Keefe & Sypher, 1981 ; Adams-Webber, 2001). An RCQ score of 25 or higher is said to be a reliable indicator of high cognitive complexity (Griffin, 2006).

### *Scoring*

RCQ scorers were two adults that both graduated from university with honors. Both scorers were blind to the hypothesis of the study. They received a brief training (approximately two hours in duration) according to the six-step training process of Burleson and Walton (1988). RCQ coding for construct differentiation was explained to them using Crockett’s Scoring Rules for Differentiation Coding (Burleson & Walton, 1988). Four rounds of pre-tests were done, and each round was followed by discussions and review of coding rule applications for difficult cases. To check current data for inter-rater reliability, two judges independently scored 14 randomly selected data adhering to Burleson and Walton’s guideline that 20% of all data should be checked for inter-rater reliability. Using Chronbach’s alpha, the present sample yielded an inter-rater reliability coefficient of .99.

## Results

All results were based on the analysis of 57 subjects. From the total number of 60 subjects, three cases that answered yes to the qualifying question, “Have you lived outside of the United States?” were eliminated from the analysis to eliminate possible extraneous influence on social perception.

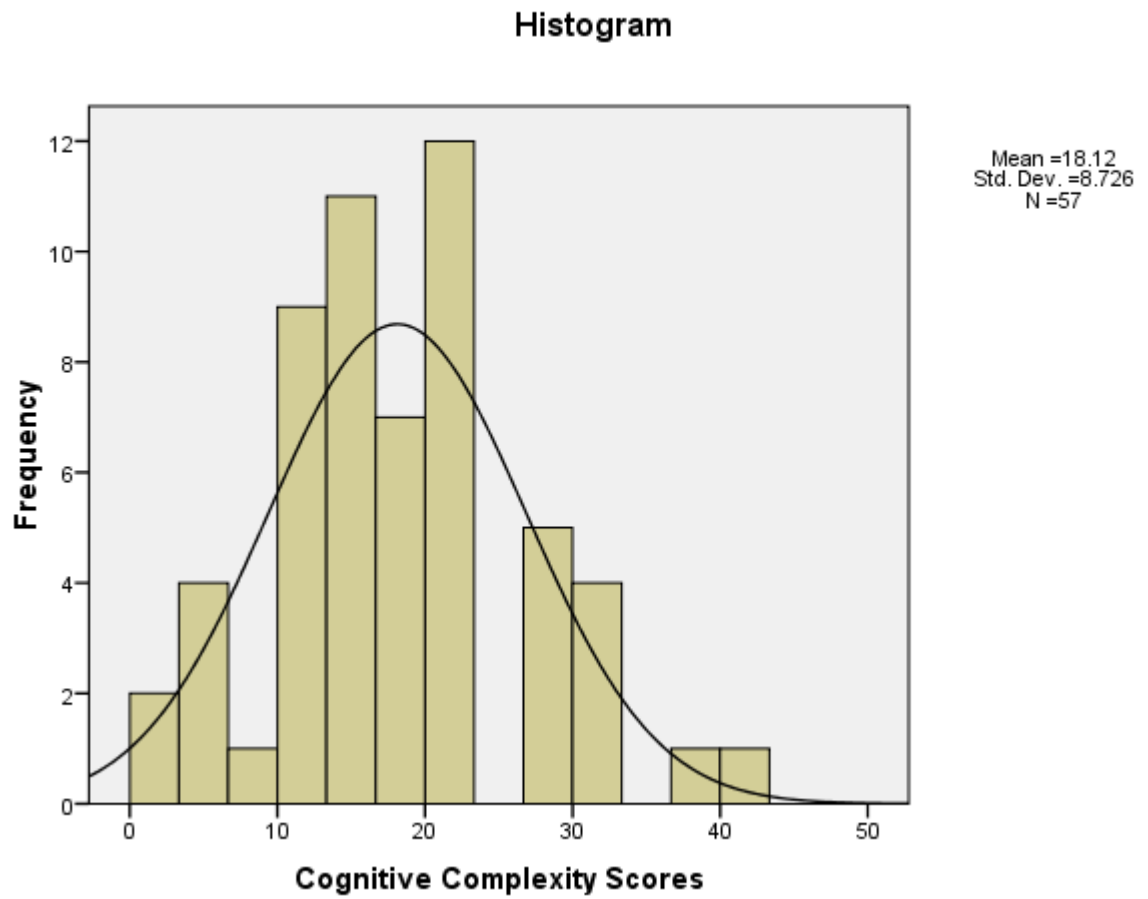
Since the main concern of the present study is the relationship between interpersonal cognitive complexity scores and willingness to date cross-culturally, the analysis mainly focuses on the variables: cognitive complexity scores, willingness to date the American over the Russian, and willingness to date the Russian over the American. For cognitive complexity (RCQ) scores, the mean was 18.12 (SD = 8.726). The cognitive complexity score distribution is shown in Figure 1. For the dating questions, participants were first asked to indicate their willingness to date the American over the Russian using a four point Likert scale with 1= Strongly Disagree and 4= Strongly Agree. The mean rating was found to be 2.54 (SD=0.888) as shown in Figure 2. Using the same Likert scale, the participants were asked to rate their willingness to date the Russian over the American. The mean rating for the second question was found to be 2.2.1 (SD=0.796) as shown in Figure 3. None of the variables appeared to be markedly non-normal.

Burleson stated that RCQ scores of 25 or higher is a reliable indication of high cognitive complexity (Griffin, 2006). In keeping with this theory, cases were separated into groups. Cases that have RCQ scores of 25 and above were placed into the “high complexity” group and those that have scores of 24 or below were placed in the “low complexity” group. Descriptive statistics were examined for both groups. The high complexity group (n=11) was found to have a mean cognitive complexity score of 31.82

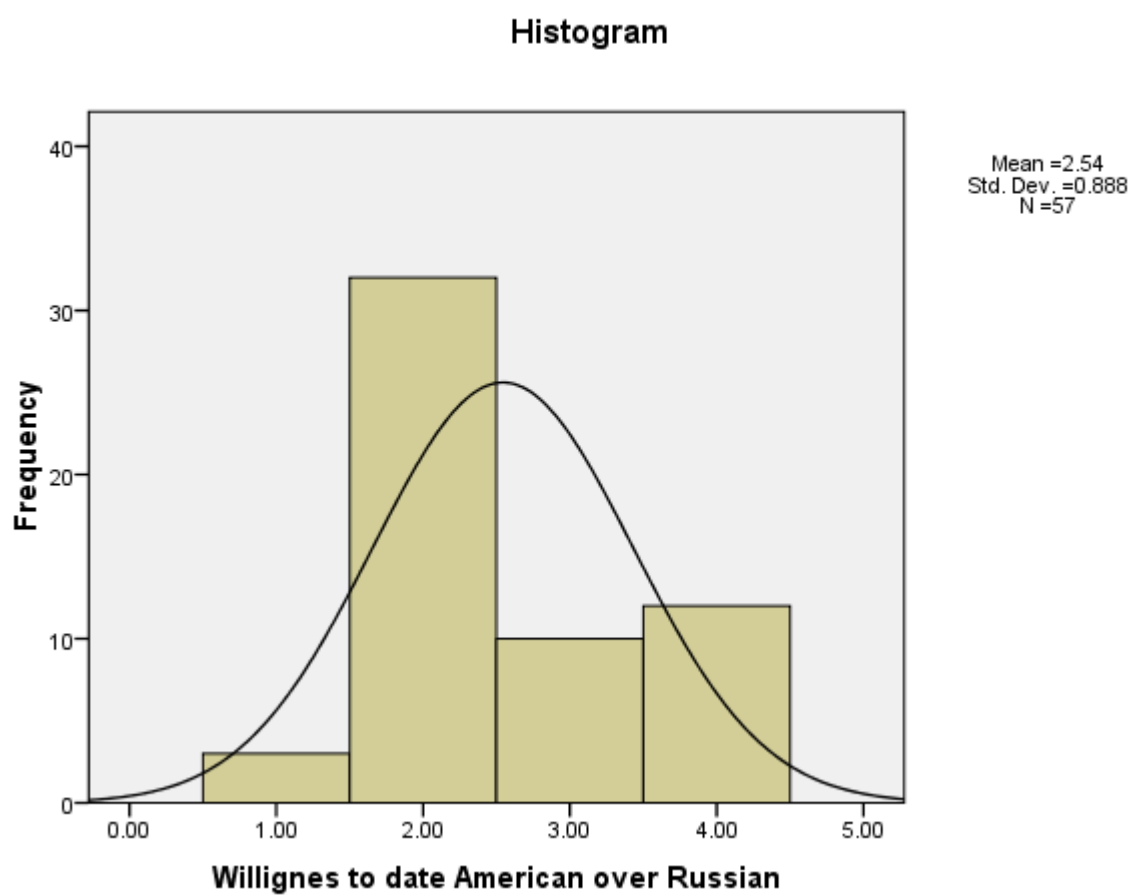
(SD=4.69), and the low complexity group ( $n=46$ ) was found to have a mean of 14.85 (SD=5.76).

An independent  $t$  test of means showed that there is no difference between the two groups in their willingness to date the American woman over the Russian woman [ $t(55) = -.007$ , ns]. This lack of difference is apparent in Figure 4, which shows the means of the two groups. When the question was asked the second time with the statement, “I am more willing to date the Russian woman over the American,” a significant difference was found between the two groups [ $t(55) = -2.51$ ,  $p = 0.15$ ]. This significant difference is apparent in Figure 5, which shows the means of these two groups. The high complexity group gave a mean rating of 2.73 in their willingness to date the Russian over the American compared to the mean rating of 2.09 of the low complexity group. Table 2 summarizes the comparison between low and high complexity groups and their willingness to date the American woman and the Russian woman.

Using Pearson’s correlation, the correlation coefficient between the two counterbalanced questions, “I am more willing to date the American woman over the Russian woman” and “I am more willing to date the Russian woman over the American woman” was found to be  $-.416$  and is statistically significant with  $p < .001$ .

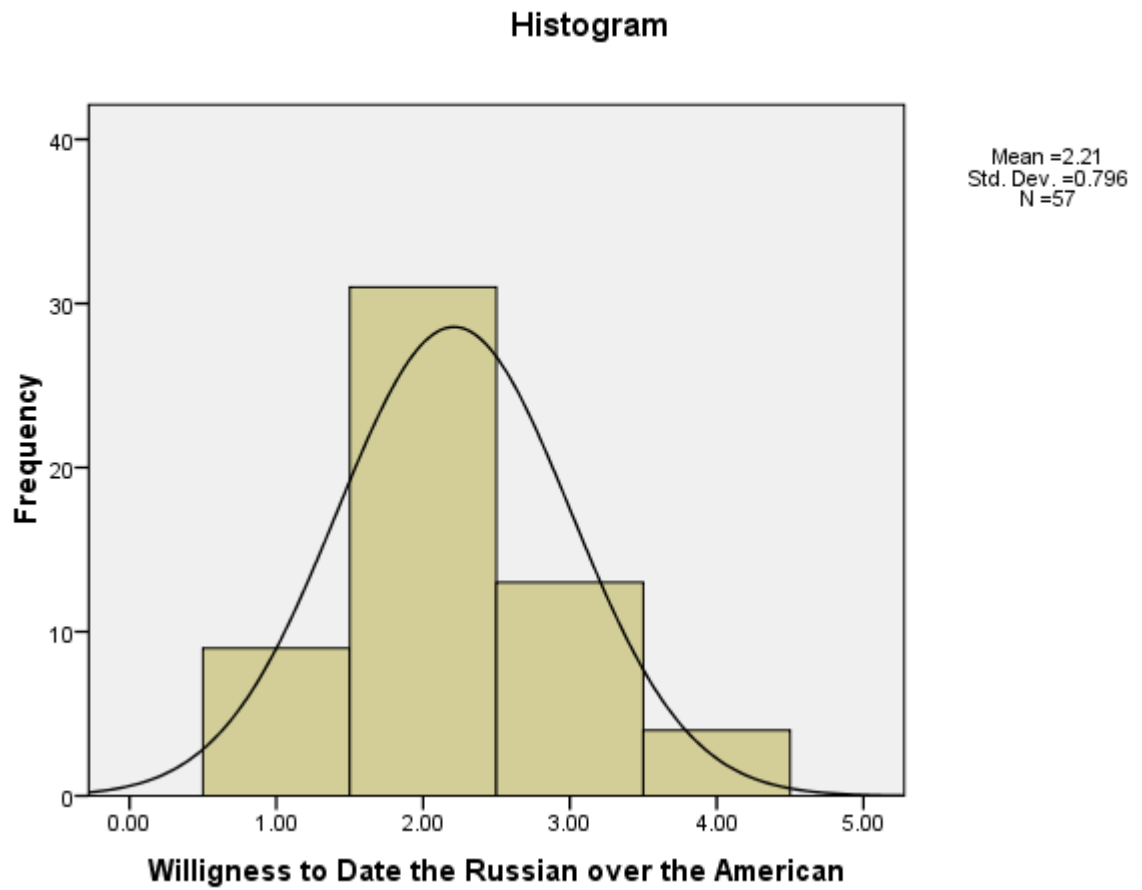


*Figure 1.* Distribution of cognitive complexity (RCQ) scores

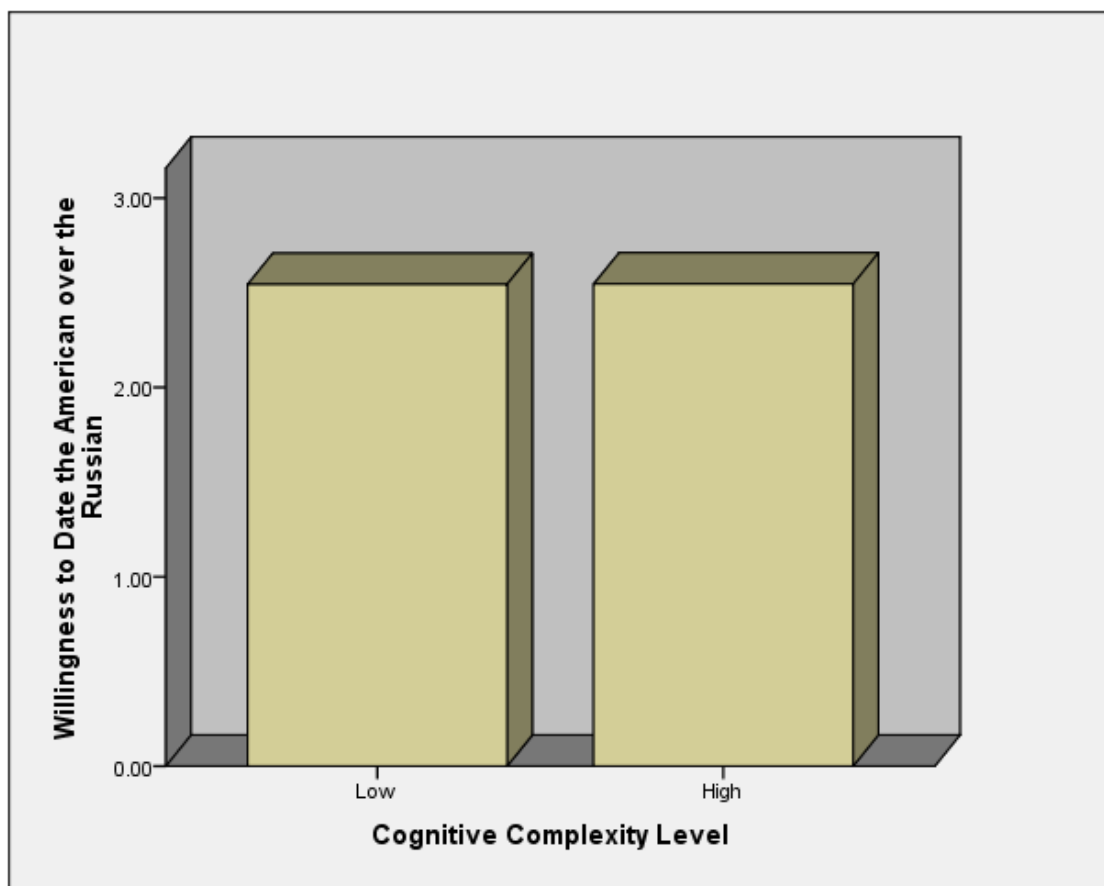


*Figure 2.* Rating distribution of willingness to date the American over Russian.

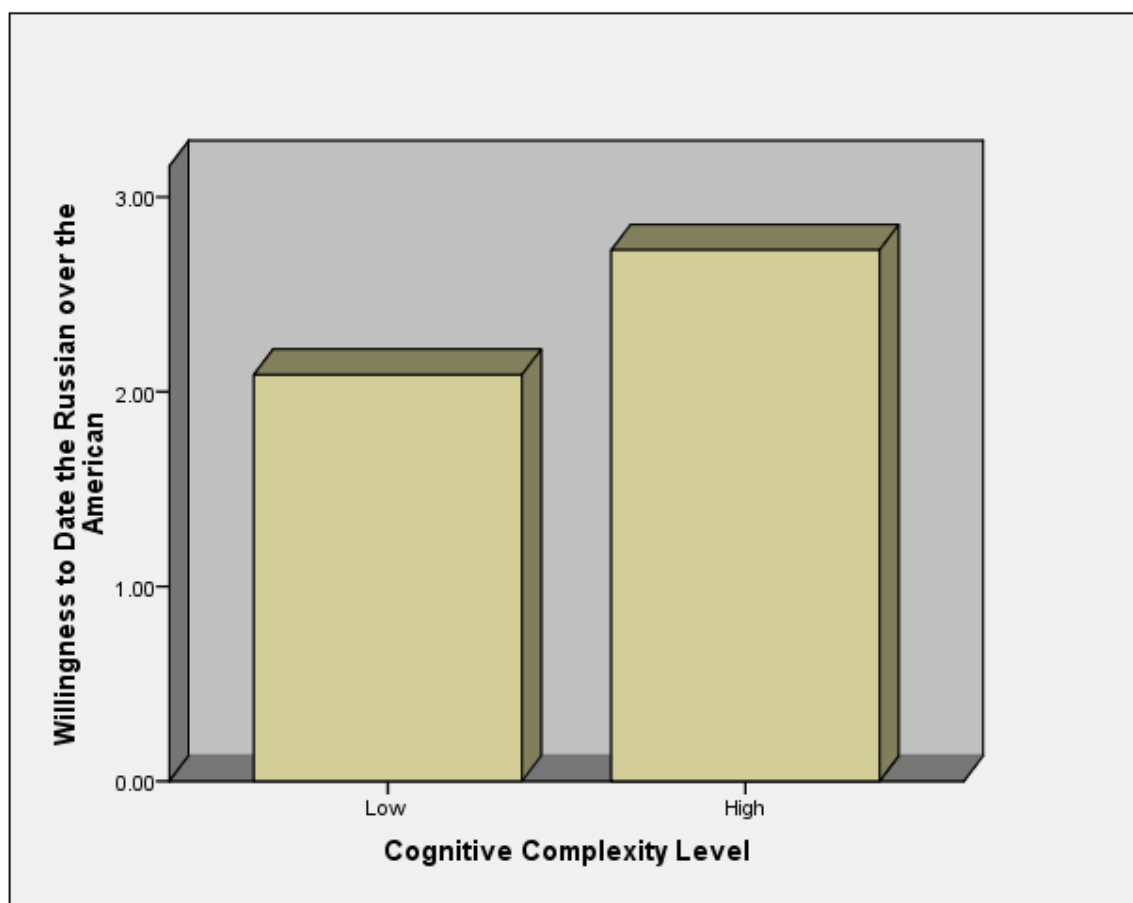




*Figure 3.* Rating distribution of willingness to date the Russian over the American.



*Figure 4.* Difference between low and high scorers and their willingness to date the American over the Russian.



*Figure 5.* Difference between low and high scorers and their willingness to date the Russian over the American.

Table 2.

*Dating Attitude Differences between High and Low Cognitive Complexity Levels*

Culture	<u>Low</u>		<u>High</u>		<u>df</u>	<u>t</u>
	<u>M</u>	<u>SD</u>	<u>M</u>	<u>SD</u>		
American	2.55	.887	2.54	.934	55	-.007
Russian	2.09	.694	2.73	1.01	55	-2.51*

\* $p < .05$ .

## Discussion

As stated earlier, the growth of multiculturalism should affect in further advancement of academic knowledge of the subject, and one important area to study is the development of cross-cultural relationships. The concern of the present study is the relationship of an individual's cognitive complexity level and his willingness to date cross-culturally. The findings of the present study partially answered this research question.

When the participants were asked to rate their willingness to date the American over the Russian, no difference was found between the two groups. In other words, the RCQ scores appeared to have no influence on their willingness to date cross-culturally. However, when the question was reworded the second time, and the participants were asked to rate their willingness to date the Russian over the American, a significant difference was found between the two groups, with the high complexity group giving a significantly higher rating.

Since the two statements, "I am more willing to date the American over the Russian" and "I am more willing to date the Russian over the American" are logical opposites of each other, it would follow that they should produce similar results. In other words, the two statements should have a high negative correlation. For example, a person who prefers the American should give a 4 rating (Strongly Agree) when asked to rate the American over the Russian, and a 1 rating (Strongly Disagree) when asked to date the Russian over the American. In fact, when Pearson's correlation was employed, it was found that the two statements are indeed negatively correlated. However, it is only a

moderate correlation as oppose to a much stronger correlation that one would expect if the participants produced consistent answers.

There is no clear explanation why RCQ scores appeared to have no influence on the willingness to date the American over the American rating but appeared to have a significant influence on the willingness to date the Russian over the American. It seemed that initially, the participants were only focusing on the physical attributes of the women the first time they were asked to rate their willingness. And since the women were matched in attractiveness level, there is no variance in the mean ratings between low and high complexity groups.

It seemed that when the participants were asked the second time, it was only then that they became aware that the women were of different cultural origins. When the statement was restated, cognitive complexity level came into effect, which is demonstrated in the significant difference between the two groups' willingness to date the Russian over the American. The difference in saliency, with the second statement making the difference in ethnic origin more obvious to the participants, may be one explanation. Further research on the effects of cognitive complexity levels on salient or non-salient variables of interest may prove beneficial for Personal Constructs Psychology (PCP).

The high complexity group's significantly higher rating on their willingness to date cross-culturally may have been influenced by several factors. Since cognitive complexity is influenced by socialization and development, it may be argued that cognitively complex persons are perhaps more experienced in complex interactions. It is then acceptable to reason that their willingness to engage in a cross-cultural dating

relationship may be influenced by their previous success in complex interactions. Further, it may be said that success instills confidence for them to engage in more complicated interactions, such as cross-cultural dating relationships.

Openness is another probable influencing factor. Constructivist theorist Jesse Delia stated that as an individual stays open, he or she may have more social experiences that can reshape constructs, leading to psychological change. Levin, Taylor and Caudle (2007) also offer support. They argue that compared to intra-cultural daters, those who date cross-culturally exhibit less prejudice and lower ethnic identification. As a result, cross-cultural daters are willing to engage in a variety of intergroup relationships. This idea may also be used to explain non-complex individuals' lower willingness to date cross-culturally. O'Keefe and Delia's (1981) study stated that those with less differentiated systems of constructs, namely the lower scorers in cognitive complexity "exhibit greater evaluative consistency in their beliefs and between their attitudes and behavioral intentions" (p. 155). It may be argued that if the low-scoring individuals already have beliefs against cross-cultural dating prior to the study, it is exhibited in their low ratings in cross-cultural dating willingness. This appears to be in conjunction with Burleson and Waltman's (1988) argument that cognitively complex individuals are less dominated by global evaluations (e.g., good/bad, like/dislike) in making decisions, because of more dimensions of judgments available to them.

A previous study on cognitive complexity and relationship of attitudes and behavioral intentions by O'Keefe and Delia (1981) provides additional explanation for the present findings. O'Keefe and Delia stated that because cognitive complexity or construct differentiation is positively associated with other aspects of developed systems,

it is a “good overall indicator of the relative developmental status of interpersonal construct system,” but may not always be the critical factor at work (p. 155). As stated earlier, cognitive complexity is positively associated with social perspective-taking ability (Burleson & Denton, 1997; Burleson & Waltman, 1988). Furthermore, social perspective taking ability is found to be a significant indicator of aptitude for conflict resolution, historical empathy and social studies achievement (Gehlbach, 2004). Aptitude in these skills may have some influencing effects on their higher ratings in willingness to date cross-culturally, but further research is needed in this area in order to form conclusions.

This study has some limitations. First of all, because of the mixed findings, the generalizability of the findings is unclear. It is also important to note that O’Keefe and Delia’s (1981) study, which also employed the two-role version of the RCQ in its investigation of interpersonal cognitive complexity of undergraduate students, had a median of 25, a higher score compared to the median of 18 in the current sample. The inclusion of female participants in O’Keefe and Delia’s study may be a probable explanation for this difference. Studies on the independence of RCQ scores from loquacity or talkativeness found that female RCQ scores are consistently higher RCQ scores than males.

In comparison with Burleson’s statement that about 70% of college students typically score between 15 and 25 with a mean of 20, the sample in this present study fails to compare. Only 47% of the scores in this sample fall in the range of 15 to 25, with mean = 18.96 (SD=2.75). It also may be argued once again that the lack of female participants accounts for some of the difference.



Although the distribution of the scores in this study appears to be normal, it may be argued that the use of the “Russian” label for the non-American profile may have some negative connotations to American participants due to differences in political ideology.

The findings give rise to several questions. As stated earlier, how do cognitive complexity levels affect salient or non-salient variables of interest? Does level of cognitive complexity only come into play when socio-cultural variables are obvious? If other populations are used in similar studies, how will the findings compare? How would mixed or multi-racial individuals score in cognitive complexity? If data from the present study is further analyzed for content, which constructs appear the most in either liked or disliked descriptions? Although enormous amount of research have shown that the RCQ measure of cognitive complexity have significant construct validity with other interpersonal communication measures, continued use of the RCQ in a variety of application settings may prove to be beneficial in securing its predictive validity.

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