

# **A Social Relations Analysis of the acquaintanceship effect on creativity**

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## **ABSTRACT**

Previous studies indicate that as acquaintanceship increases, so do Self-Other Agreement (SOA) and consensus. These factors were studied using the Social Relations Model for creativity, extraversion, humour and problem-solving intelligence, with several different indexes of acquaintanceship. It was found that acquaintanceship can be best assessed by two variables: Length of acquaintanceship and Intimacy. The usual acquaintanceship patterns were observed (acquaintance leads to increased SOA, increased consensus, decreased assumed similarity) with the exception of creativity, for which SOA decreased as acquaintance time increased. Implications of the results and possible causes of the unusual pattern of results were discussed.

## **INTRODUCTION**

A great deal of human behaviour involves interaction with others, and much of that interaction crucially depends on social perceptions of various sorts. In particular, there are three main types of interpersonal perception: self-perception, other-perception and meta-perception (the perception of how others see oneself). A large number of issues of central importance in social and personality psychology revolve around these perceptions and their mechanisms. Such issues include the origin of our self-images, the accuracy of our social perceptions, and the accuracy and validity of personality questionnaires and assessments.

These lead to a number of basic questions in interpersonal perception (Kenny, 1994). These include assimilation (the extent to which one sees others as being alike), consensus (the extent to which different others agree about oneself), reciprocity (the extent to which two people see each other in a similar way), accuracy (the extent to which one is perceived accurately by others), self-other agreement (the extent to which others' and one's own opinion of oneself agree), assumed similarity (the extent to which one's self-perception and one's perception of others coincide), and meta-accuracy (the extent to which one is accurate in assessing others' impressions of oneself).

For a significant part of the last few decades the study of social perception halted because of methodological problems of analysis which were pointed out by Cronbach (1957?). In particular, he asserted that previous social perception analyses were fatally flawed because they did not take into account the many interacting factors at work in social perception. He showed that self-other differences in opinion were affected by four distinct effects, according to the trait being examined and the persons being considered. Due to the complexity of accounting for these factors, study in this area diminished greatly, with an emphasis shifting towards biases in perception (such as the 'fundamental attribution error' - reference?).

However, with the advent of modern computers, it has become possible to account for many interacting effects in this way. In particular, Kenny's Social Relations Model (SRM) (Kenny 1988, 1994) is designed to deal with the methodological problems previously encountered.

The SRM posits that a social perception (e.g. of a personality trait) is based on three main factors: An actor effect, a personality effect, and a relationship effect. Thus, A's assessment of B's intelligence is influenced by how much A generally sees people as intelligent (actor effect), how much B is generally seen as intelligent by others (partner effect), and A's unique impression of B (relationship effect).

Various aspects of social perception can thus be studied by looking at the extent to which these different factors contribute to perception and the correlations between assessments taking these factors into account. For example, the proportion of the total variance in assessments accounted for by partner effects is equivalent to the degree of consensus since if there was no partner effect (i.e. people generally tended to be seen in a similar way), then no-one would agree on another person's personality.

The SRM is particularly well-suited to use in a round-robin type of design, in which everyone in a group rates everyone else. With sufficient people in each group, it is possible to extract the contribution made by these different factors. An additional benefit of this kind of design is that there will be no general differences between targets and judges, since each person fills both roles.

Two areas of social perception which can be examined with the SRM are Self-Other Agreement (SOA), and consensus. These are of particular importance because of their relevance to the issue of accuracy in person perception. This is not just of interest in its own right but also in relation to the use of self-report questionnaires and friend-assessments in personality studies, and the use of such personality scales in social psychology experiments.

There is no way to directly measure personality, as it is only a theoretical construct underlying certain predispositions to certain types of behaviour. Self- or other-assessments are usually used to gauge personality, but any such scales must be shown to be accurate, and so valid. One way to do this is to show that personality measures successfully predict behaviour, but behavioural prediction is fraught with difficulties (Colvin & Funder, 1991). An alternative is to use consensus as a proxy for accuracy. This is somewhat unsatisfactory because, although disagreement among judges clearly shows inaccuracy, the reverse is not necessarily true. Nevertheless, it seems reasonable to assume that if a number of well-acquainted individuals agree with each other in their judgement of someone, and if the target also agrees with them, then these assessments can be usable as accurate assessments of personality.

The SRM can also be used to look at other issues of interest, such as the basis of one's self-perceptions (self-judgement, observation of others' assessments, and self-theory, according to Kenny & DePaulo, 1993), and the influence of various other factors such as acquaintance and particular aspects of traits (such as observability and evaluativeness) on agreement and accuracy.

Previous findings in these areas are manifold. Kenny & DePaulo (1993) found that people are generally quite accurate at meta-perception, but insensitive to the differences in others' opinions of them. Funder & Colvin (1988) found that the rated observability of different traits contributed to the agreement (SOA and consensus) for those traits, with more 'visible' descriptors having more agreement. This finding is supported by John & Robins (1993) who found that extraversion ratings were more agreed upon (extraversion being a socially visible characteristic). They also found that consensus tends to be higher than SOA, but that this difference is actually confined to evaluatively extreme traits (such as 'obnoxious') for which self-assessments are presumably prone to bias.

Several studies also indicate significant acquaintance effects, i.e. differences in levels of agreement resulting from levels of acquaintanceship. In almost all studies acquaintanceship is indexed by the length of time that two persons have known each other. Colvin & Funder (1991) suggest that this is simplistic, and that more than one sort of measure should be used. Nevertheless, a number of significant acquaintanceship effects have been documented. The most commonly-observed effects are that increased acquaintanceship leads to increased SOA (Bernieri et al, 1994; Colvin & Funder, 1991; Funder & Colvin, 1988; Funder et al, 1995; John & Robins, 1993; Kenny & Kashy, 1994) and increased consensus (Borkenau & Liebler, 1993; Funder & Colvin, 1988; Funder et al, 1995; John & Robins, 1993; Kenny et al, 1994; Kenny & Kashy, 1994; Kenny, 1991). Typical average SOA and consensus levels are 0.4-0.5.

The possible sources of this agreement are many and varied. They include shared meaning systems, overlap of experiences, communication between others, actual similarity, and the accumulation of information by acquaintanceship. Previous studies (Funder et al, 1995) suggest that judgement of others is partly based on one's own self-perception. However, not only does this basis of judgement decline with acquaintanceship, it is also found that friends tend to not be very similar (in terms of personality) anyway, even though such similarity may very well be assumed by such friends.

Clearly, there are a number of interesting effects which can be examined. Previous studies have been deficient in a number of ways: Many have not used the SRM, which appears to be the best methodologically; acquaintanceship has only been measured one way (it is unknown whether other indices of friendship give different effects); and there are various traits which have not been carefully studied as yet. In particular, creativity has not been studied in any published papers. However, a pilot group project undertaken by undergraduates at Oxford University hinted at the possibility that creativity may be unusual in showing greater SOA with lower levels of acquaintance (Emler, personal communication).

Thus, this study was intended to examine the effects of friendship (measured in many ways) on several personality traits (particularly creativity) within a SRM experimental design. Humour was also examined as a trait, as it was hypothesised that this would show similar patterns to creativity, being as it is a trait which often involves creative thought, and which is seen as a subset of creativity within a number of theories of humour (Murdock & Ganim, 1993). Moreover, it is more highly socially visible, being an aspect of everyday social interaction, and so higher SOA and consensus would be expected for humour.

## **METHOD**

### ***Subjects***

Subjects were recruited in groups of four, such that each person in a group knew each other person to some extent. These were mainly composed of undergraduate students at Oxford University. There was a total of 52 subjects (13 groups), composed of 17 women and 32 men (with three of unknown sex due to incomplete questionnaires).

### ***Materials***

The questionnaires used in the experiment asked each subject to rate themselves and each other subject in the group on 12 different 9-point trait scales (three measures each for creativity, extraversion, humour and problem-solving / practical intelligence - see Appendix), as well as how they thought others perceived them (meta-perception judgement). The questionnaire also asked for details of acquaintanceship in six different ways (length of acquaintanceship, frequency of interaction, how well they get on, how well they know each other, how much they like each other, and how close they are to each other).

### ***Procedure***

The groups of subjects were placed in a quiet room and instructed to assign each of themselves a letter (A-D) and complete the questionnaire. The use of letters was designed to ensure confidentiality. Once all of the subjects had completed their questionnaires the examiner was called into the room, and the four questionnaires were gathered together and taken away.

## **RESULTS**

The results were analysed in three different ways: At the dyad level (where data was related by each individual pairing, giving 156 cases of data), subject level (where data was aggregated for each subject, giving 52 cases), and by Social Relations Analysis.

### ***Acquaintanceship measures***

A factor analysis was performed on the acquaintanceship scores, comparing the different friendship scores for each individual dyad. The eigenvalues test (eigenvalues > 1) indicated that the extraction of two factors was appropriate. These two factors accounted for 75% of the variance. A Varimax rotation was used to achieve simple structure. The loadings on these two rotated factors are shown in Table 1. As can be seen, the first factor would appear to be a general Intimacy factor (with closeness, frequency of interaction, getting on, knowing and liking), and the second factor corresponds to length of acquaintance. Almost all of the factors were intercorrelated to some extent (suggesting a general acquaintance factor), though frequency of interaction and length of acquaintance were slightly negatively correlated ( $r=-0.17$ ). Correlations between the ratings of acquaintance on single measures between the two halves of a dyad

showed significant agreement, but also a fair degree of disagreement for liking and getting on: Time  $r=0.999$ ; Frequency  $r=0.79$ ; Know  $r=0.78$ ; Closeness  $r=0.76$ ; Getting On  $r=0.59$ ; Liking  $r=0.57$ .

On the basis of the results of this factor analysis, an aggregated intimacy score and length of acquaintance were used as acquaintance variables in later analyses.

| <i>Acquaintanceship measure</i>           | <b>Factor 1</b> | <b>Factor 2</b> |
|---|-----------------|-----------------|
| "How long known have you known ..."       | 0.186           | 0.971           |
| "How often to you see ..."                | 0.684           | -0.103          |
| "How well would you say you know ..."     | 0.911           | 0.122           |
| "How close would you say you were to ..." | 0.924           | -0.025          |
| "How often get on well with ..."          | 0.749           | -0.213          |
| "How much do you like ..."                | 0.871           | -0.045          |

Table 1: Rotated factor loadings for acquaintanceship variables.

### **Trait reliability**

The coefficient alpha of self-ratings for the four traits is as follows: Creativity 0.83; Extraversion 0.78; Humour 0.84; Problem-solving intelligence 0.48. An SRM analysis of the stability of the different traits indicated the following stable/unstable balances respectively (by variance partitioning): Creativity 0.54/0.46; Extraversion 0.64/0.36; Humour 0.68/0.32; Problem-solving 0.30/0.70. These figures indicate that the Problem-solving measure is not especially reliable, but that the others are perfectly acceptably reliable. For later analyses, aggregated measures (aggregating across the three measures used for each trait) were used.

### **Interrelation of traits**

Correlations were calculated between the four traits for self-ratings, other-ratings and meta-ratings for each dyad. The means of these are shown in Table 2. As can be seen, creativity is correlated somewhat with extraversion and problem-solving. Moreover, humour is highly correlated with extraversion and creativity. The correlation between problem-solving and humour was found to disappear when the correlations between creativity and these two traits was partialled out.

| <i>Trait</i>           | <i>Creativity</i> | <i>Extraversion</i> | <i>Humour</i> |
|------------------------|-------------------|---------------------|---------------|
| <i>Extraversion</i>    | 0.14*             | -                   | -             |
| <i>Humour</i>          | 0.47**            | 0.50**              | -             |
| <i>Problem-solving</i> | 0.21*             | -0.02               | 0.12          |

Table 2: Average correlations between traits. \*:  $p<0.05$  \*\*:  $p<0.01$  (two-tailed)

### **Self-other differences**

A comparison of the average scores given by others and by the self for each questionnaire item indicated significant differences for only two items: For 'shy vs. self-confident,' subjects rated themselves lower

than they rated others, at 4.8 (on a 1-9 point scale) for the self against 5.4 for others ( $t=4.085$ ,  $d.f.=12$  (group by group),  $p<0.05$ ). For 'good at solving problems vs. bad at solving problems' subjects rated themselves higher than they rated others, at 6.9 against 6.2 ( $t=3.398$ ,  $d.f.=12$ ,  $p<0.05$ ).

### **Analysis of basic dyad/group data**

The figures for SOA, consensus and accuracy are shown in Table 3, as derived from the basic data, rather than by a Social Relations Analysis. SOA and meta-accuracy correspond to the correlation between the average assessment by the other three persons and the self-judgement/meta-judgement respectively. Consensus corresponds to the average of the correlations between the three pairs of other-assessors in each group. As can be seen, accuracy is actually lower than SOA for the reliable traits. All of the correlations are significant ( $p<0.05$ ).

| <i>Trait</i>           | <b>Consensus</b> | <b>SOA</b> | <b>Meta-accuracy</b> | <b>Assumed Similarity</b> |
|------------------------|------------------|------------|----------------------|---------------------------|
| <i>Creativity</i>      | 0.345            | 0.276      | 0.168                | 0.349                     |
| <i>Extraversion</i>    | 0.477            | 0.634      | 0.516                | 0.232                     |
| <i>Humour</i>          | 0.307            | 0.506      | 0.478                | 0.328                     |
| <i>Problem-solving</i> | 0.410            | 0.207      | 0.393                | 0.412                     |

**Table 3:** Agreement levels derived directly from subject data.

The data set was also split by the median of a number of variables (sex, intimacy, acquaintance length), and correlations were then computed for the top/bottom halves of the subjects to investigate if these variables had an effect on the levels of agreement. The following differences were [non-significant observed patterns reported in square brackets]:

*Creativity:* Assumed similarity: Longer acquaintance -0.003, Shorter acquaintance 0.47 ( $p<0.01$ )  
 SOA: Frequent interaction 0.50, Infrequent interaction 0.05 ( $p<0.05$ )  
 [Consensus: Longer acquaintance 0.44, Shorter acquaintance 0.25]  
 [Consensus: Male (ratees) 0.21, Female (ratees) 0.44]

*Extraversion:* Assumed similarity: Higher intimacy 0.29, Lower intimacy -0.07 ( $p<0.05$ )  
 [Consensus: Longer acquaintance 0.58, Shorter acquaintance 0.33]

*Humour:* Assumed similarity: Longer acquaintance 0.08, Shorter acquaintance 0.34 ( $p<0.05$ )  
 Assumed similarity: Higher intimacy 0.40, Lower intimacy 0.09 ( $p<0.05$ )  
 [Consensus: Higher intimacy 0.42, Lower intimacy 0.18]

*Problem-solving:* Meta-accuracy: Longer acquaintance 0.47, Shorter acquaintance 0.14 ( $p<0.05$ )  
 Consensus: Higher intimacy 0.62, Lower intimacy 0.05 ( $p<0.05$ )  
 Consensus: Higher extraversion 0.21, Lower extraversion 0.61 ( $p<0.05$ )

### **Social Relations Analysis**

The data was subjected to analysis by the Social Relations Model, for all 13 groups and also for sets of opposing groups with the highest / lowest average scores for intimacy and time. The relative variance

partitioning of the aggregated measures is shown in Table 4, which indicates the assimilation and consensus levels. Also, assumed similarity and SOA are indicated by the correlations between self-ratings and actor / partner effects, as shown in Table 5. A significant reciprocity correlation was only seen for relationship reciprocity for humour, at  $r=0.407$ .

| <i>Trait</i>           | <b>Actor variance (assimilation)</b> | <b>Partner variance (consensus)</b> | <b>Relationship variance</b> |
|------------------------|--------------------------------------|-------------------------------------|------------------------------|
| <i>Creativity</i>      | 0.30 [0.15]                          | 0.25 [0.17]                         | 0.45 [0.22]                  |
| <i>Extraversion</i>    | 0.17 [0.09]                          | 0.50 [0.37]                         | 0.34 [0.18]                  |
| <i>Humour</i>          | 0.20 [0.12]                          | 0.29 [0.22]                         | 0.51 [0.34]                  |
| <i>Problem-solving</i> | 0.16 [0.00]                          | 0.36 [0.14]                         | 0.47 [0.15]                  |

**Table 4:** Relative variance partitioning in SRM analysis of the data. [Stable figures in square brackets].

| <i>Trait for self-rating</i> | <b>Actor effect correlation (assumed similarity)</b> | <b>Partner effect correlation (Self-Other Agreement)</b> |
|------------------------------|--|--|
| <i>Creativity</i>            | 0.49 [0.53]  | 0.42 [0.45]  |
| <i>Extraversion</i>          | 0.48 [0.53]  | 0.79 [0.83]  |
| <i>Humour</i>                | 0.53 [0.57]  | 0.70 [0.78]  |
| <i>Problem-solving</i>       | N/A (assimilation too low)                           | 0.25 [0.13]  |

**Table 5:** Self-actor/partner correlations for SRM analysis. [Stable figures in square brackets].

| <i>Condition</i>                | <b>Longer Acquaintance</b> | <b>Shorter Acquaintance</b> | <b>Higher Intimacy</b> | <b>Lower Intimacy</b> |
|---------------------------------|----------------------------|-----------------------------|------------------------|-----------------------|
| <i>Creativity consensus</i>     | 0.22                       | 0.10                        | 0.16                   | 0.17                  |
| <i>Creativity SOA</i>           | 0.12                       | ~ 1.0                       | 0.65                   | 0.26                  |
| <i>Creativity AS</i>            | 0.09                       | 0.89                        | 0.29                   | 0.74                  |
| <i>Creativity reciprocity</i>   | 0.17                       | -0.06                       | -0.20                  | 0.60                  |
| <i>Extraversion consensus</i>   | 0.46                       | 0.25                        | 0.38                   | 0.36                  |
| <i>Extraversion SOA</i>         | 0.90                       | 0.86                        | 0.86                   | 0.80                  |
| <i>Extraversion AS</i>          | 0.39                       | 0.61                        | 0.51                   | 0.58                  |
| <i>Extraversion reciprocity</i> | -0.17                      | 0.65                        | 0.36                   | 0.11                  |
| <i>Humour consensus</i>         | 0.23                       | 0.19                        | 0.25                   | 0.19                  |
| <i>Humour SOA</i>               | 0.88                       | 0.69                        | 0.70                   | 0.86                  |
| <i>Humour AS</i>                | 0.56                       | 0.60                        | 0.44                   | 0.73                  |
| <i>Humour reciprocity</i>       | 0.21                       | 0.68                        | 0.15                   | 0.61                  |

**Table 6:** SRM data from subset of the groups according to time/intimacy, based on stable variance. Consensus = partner variance. SOA = self-partner correlation. AS = Assumed Similarity (self-actor correlation). Reciprocity = relationship-relationship correlation. ‘~1.0’ indicates that the correlation is high - the SRM analysis gave a figure >1.

Separate SRM analyses were performed for subsections of the 13 groups according to length of acquaintanceship and level of intimacy. The results can be seen in Table 6. Problem-solving has been excluded from this analysis (which is based on stable variance only), as it was too unreliable to give useful results. Some clear patterns are visible: For all traits, greater acquaintanceship leads to a reduction in assumed similarity. Where an obvious difference is visible, greater intimacy leads to reduced reciprocity. In most conditions, greater acquaintanceship also leads to an increase in consensus (otherwise no

particularly obvious difference is visible). This is also true of SOA, except for creativity, where although greater *intimacy* leads to *increased* SOA, longer *length of acquaintance* leads to sharply *decreased* SOA. This result is also supported by straight correlations of aggregated scores including unstable variance: 0.14 vs. 0.88. This spectacular difference is not seen in analyses based on basic dyad / subject data, presumably because this effect is masked by conflicting factors such as assimilation, assumed similarity, and so on. It is not due to an artefact resulting from use of group portioning of the data (i.e. the longest/shortest 7/6 groups), as this difference is not seen at a significant level when the data is split on this basis and analysed by non-SRM correlations.

## DISCUSSION

The data on acquaintance measures clearly indicate that the use of a single measure (length of acquaintance) is simplistic. Not only is it largely unrelated to self-assessed depth of knowledge of a person, it is also clear that certain effects of acquaintanceship are peculiar to one particular sort of acquaintance index, particularly for creativity.

The unreliability of the problem-solving intelligence measure meant that its results were unusable in most later analyses. This unreliability most probably resulted from its broadness as a trait compared to the others. The use of this trait stemmed from its hypothetically intellectual but practical (i.e. non-creative) nature. However, it proved hard to come up with many questionnaire items tapping the same concept, so the trait's usefulness was limited. Previous studies (e.g. Kenny et al. 1994, John & Robins 1993) have already systematically studied the 'Big Five' personality factors in this domain, and so the study of narrower traits together with such established factors as extraversion seemed apposite.

The correlations between traits supported the hypothesis that humour was a more socially observable aspect of creativity, as it is highly related to rated creativity and rated extraversion. Moreover, the strength of various agreement effects for humour frequently match the mid-point of the effects for extraversion and creativity. However, the profound negative modulation of SOA by acquaintance time is not seen for humour. One possible theory for this pattern of results is discussed later.

The overall levels of consensus seen in this experiment fit well with previous studies, lying in the range of 0.25-0.50. However, the SRM analysis suggests much higher levels of SOA, a finding in conflict with previous results. For example, John & Robins (19??) found that levels of SOA and consensus were roughly equal for evaluatively neutral traits, with SOA becoming smaller than consensus with highly evaluative ratings. Likewise, Kenny & Kashy (1984), using an SRM analysis, found that consensus was generally greater than SOA. This discrepancy with previous results could be a result of the specific types of subjects used (college students in fairly-well acquainted groups). However, this would appear to be unlikely given that this would be expected to lead to generally higher levels of SOA *and* consensus. Kenny & Albright (1987) found SOA levels of 0.65 for humour, which suggests that the results obtained for this trait at least are reasonable (SOA=0.70).

The analysis of the basic data indicated that SOA was consistently greater than meta-accuracy for the reliable traits, though this difference was not significant. This result is particularly interesting, as one would expect the opposite pattern. On the basis of these results, it would seem that subjects would have been more accurate if they had just assumed that others see them as they see themselves.

In all of the varieties of analysis, it was a clearly observable pattern that shorter lengths of acquaintance were accompanied by greater levels of assumed similarity. This perhaps suggests that, when people are not very well-acquainted, they partly base their assessments of others on their assessments of themselves. This is supported by experiments which looked at assessment by strangers (Funder et al. 1995). The pattern observed was that strangers were less accurate than friends (i.e. they had less SOA), but that significant assumed similarity was seen for strangers but which was not observed for friends.

One conflicting aspect of the reported results is the relation between intimacy and assumed similarity. The SRM analysis suggested that (with the exception of extraversion) lower intimacy was accompanied by greater assumed similarity. However, the analysis of the basic scores suggest that lower intimacy is accompanied by less assumed similarity. On methodological grounds, the SRM results are more likely to indicate the true pattern (thanks to the SRM's ability to deal with the many factors at work in social perception). Kenny & Kashy's results (1984) do not indicate that there was any significant difference between close friends and more distant acquaintances for assumed similarity, except for 'competence' where assumed similarity was higher for friends.

A more consistently supported result was the relation between acquaintanceship and consensus, with more consensus seen with longer lengths of acquaintance and more intimacy. This result is supported by many other studies, and which also show similar overall levels of consensus. Indeed, when experimental reports use the term 'the acquaintanceship effect' they refer to the positive relationship between acquaintanceship and consensus. This experiment has been able to replicate this result and also show that it holds true with a different sort of acquaintanceship measure. However, the differences between conditions were quite small. This may have resulted from the constrained nature of the subject sample (college students). This level of consensus was sufficient for consideration of SOA to be meaningful - if others do not agree among themselves, there is no way that they can collectively agree with the target's self-rating. Likewise, levels of assimilation were high enough for meaningful consideration of assumed similarity (with the exception of problem-solving).

Kenny's Weighted Average Model (WAM) (Kenny, 1991) is a theoretical model of the factors which contribute to consensus. The factors are information (level of acquaintanceship), overlap, shared meaning systems, consistency of behaviour, extraneous information (e.g. first impressions), and communication between judges. This quantitative model has been used by Kenny to make some predictions about consensus effects. For example, it predicts that if overlap is perfect, then there will be no acquaintanceship effect. Also, it predicts that increased communication leads to increased consensus. The model is also able to predict the conditions under which consensus is an acceptable proxy for accuracy. In particular, the

model predicts that if there is communication or overlap, this worsens the adequacy of consensus as an indicator of accuracy.

Unfortunately, it is impossible to estimate any of the WAM parameters from this study, though previous studies (e.g. Borkenau & Liebler, 1993) indicate that all of Kenny's putative factors are at work, and in the expected direction. This was shown by the use of strangers, which makes it possible to fix the amount of overlap, communication and information. However, given the nature of the subjects recruited for this study, it is likely that communication and overlap were high. This would predict that the acquaintance effect would be small, which fits the observed results. Moreover, this suggests that accuracy may not have been high. In other words, it is difficult to be sure who would be most accurate in their assessment, out of the self or others, when little or no SOA was observed.

With the exception of intimacy with extraversion, lower acquaintanceship led to increased reciprocity. In other words, close friends' unique impressions of each other were less similar. Quite why this is so is hard to ascertain. No significant studies of this effect have been done in the past.

The most significant effect seen in this experiment was the effect of acquaintance time on SOA for creativity. The effect seen in the earlier pilot study was replicated, to a startling degree. Moreover, this was in contrast to the effect of intimacy, for which the opposite pattern was seen. As the main intention of this study was to look at the effects of acquaintanceship on the perception of creativity, it is gratifying to see the unusual pattern of results replicated from the earlier pilot study. However, this result is still in need of further replication, for two reasons. Firstly, the effect, though strong, was based on the comparisons of two data sets of only seven and six groups. This is insufficient to establish the result as totally reliable, as there is a slight possibility that the observed results were a chance effect resulting from the study of whole groups rather than individuals or dyads. Secondly, the result is in such marked contrast to the established pattern (that acquaintanceship goes with higher SOA) that this result needs further study.

Nevertheless, the overall pattern of results for other traits fits well with established results from other studies, which suggests that it is not unacceptable to form some hypotheses on the basis of the findings of this study.

The results described indicate that, the longer a pair of individuals know each other, the less they agree about each others' creativity, but agree more for every other trait. This clearly suggests that the process underlying the perception of creativity is different from that for the other traits. The process must operate in such a way that creativity (at least as it is assessed by the self) is clearly 'visible' when a person is first met, but somehow becomes 'invisible' over time. This is in contrast to normal social perception which is done on a continuous basis, leading to the usual acquaintance effect.

My hypothesis is that creativity is assessed by the perceived novelty of one's ideas, but that a person's novel ideas come to appear ordinary to the external observer as they become accustomed to them. This

perhaps illustrates the questionable nature of creativity as a trait. Amabile (Amabile, 1982) and others consider it best to measure creativity in terms of creative products, rather than as a personality trait (such as divergent thinking). Thus when an observer first meets a person, they might be impressed by their unusual ideas (e.g. for things to do in the evening) because such ideas are new to *them*, rather than being intrinsically novel. Over time, the observer will become accustomed to these ideas and they will cease to appear novel and creative. On the other hand, the person being observed may judge their own creativity in terms of the novelty and unusualness of their ideas in relation to others. This assessment would remain fairly constant over time. This theory is effectively embracing the fact that creativity is judged within a social context, and this context can be different for different observers.

This state of affairs would mean that creative people (who had come up with many original products/ideas in the past) would be seen as creative when first met, according to the differences between such ideas and the observers' (leading to high SOA), but that consensus would be low because judgements of creativity are judged in relation to each observer's own ideas. As time goes by, such novel ideas would begin to appear ordinary, and creativity would have to be assessed in some other (inaccurate) way, but which others agreed upon, leading to higher consensus.

According to this hypothesis, the non-observation of the negative acquaintance effect for humour is unsurprising, since humour partly involves the continuous, spontaneous creation of incongruous/unexpected relationships (Murdock & Ganim, 1993), which is amenable to continuous informational observation. After all, people are usually seen as funny by their ability for spontaneous wit and being able to come up with new jokes, not simply what jokes they know (though this is an aspect of humour). This is in contrast to other sorts of creativity, for which there are usually few opportunities, and which is more rare and so more visible by previous creative products than continuous creative activity.

This hypothesis regarding the nature of the perception of creativity leads to the following two predictions: That the negative acquaintance effect may not be seen among individuals who engage in genuinely creative activity in their interaction with others (e.g. art students), and that in normals there may be an inverted U relationship, where creativity SOA is low at zero acquaintance because the judges will not be in a position to assess the novelty of a person's ideas because the target will not have revealed them to the judges.

Thus, not only is the unusually acquaintanceship observed in this study in need of replication, there is also the opportunity for the testing of my hypothesis for its causes by some of its predictions.

## **CONCLUSION**

This study has replicated the previously-observed acquaintance effect for SOA and consensus in social perception, but with a reversed effect for the perception of creativity over time. A theory which can explain the observed data is that creativity is initially assessed by the unusualness of the target's ideas in

comparison to the judge's, who then becomes accustomed to them, leading to a reduction in SOA. This is clearly in need of further investigation.

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