Shared Identity Helps Partially Distributed Teams, But Distance Still Matters

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ABSTRACT
Previous research on partially distributed teams has revealed a cluster of problems, including difficulty coordinating, 'ingroup' formation among members in different locations, and lower trust in teammates across distance. But these prior studies involved groups of strangers; would pre-existing groups have the same problems? We recruited groups from the same fraternity or sorority to test groups with a pre-existing shared identity. We found that these groups did indeed coordinate work better, cooperated more, and were more willing and able to take on larger scale projects. However, even within these high-performing shared identity groups, there were significant differences between collocated and remote members in performance, group efficacy, and sense of group identity.

Categories and Subject Descriptors
H.1.2 User/Machine Systems, Human factors. H.5.3. Group and Organization Interfaces, collaborative computing. K.4.3. Organizational Impacts, computer supported collaborative work.

General Terms
Experimentation, Human Factors

Keywords
Partially distributed teams, distributed work, shared identity, group identity, group efficacy, coordination.

1. INTRODUCTION
Organizational scholars such as Tom Malone predict that the 'Future of Work' [10] will feature less hierarchical control and centralization, and more work performed by groups of independent contractors brought together for specific project teams. Geographic distribution is a key element of this; teams assembled from best-available experts will not necessarily be collocated, and will need to use technology and work practices to collaborate effectively. Despite the money and attention given to development of new collaboration technologies, distance remains a barrier to collaboration [11].

1.1 Shared identity
A sense of shared identity is crucial for effective teamwork in any geographic arrangement. Shared identity (also sometimes called group identity, collective identity, or in-group membership) is a key factor that allows groups of individuals to act in their collective best interest, even in situations such as social dilemmas [8] where selfish or opportunistic behavior would doom group efforts. When individuals see themselves as part of a group, they are more willing to make individual sacrifices, work harder toward collective goals, allocate resources more fairly, and coordinate work more smoothly [4, 5].

What causes groups to have shared social identity? Experimentally, Tajfel [13] and later social psychological researchers have shown that forming into such groups is extremely common, and can be triggered by many things: a sense of shared fate; personal similarities; shared experiences; and even opportunities to communicate.

Group identity can be a double-edged sword, however. Prior experimental research on partially distributed groups, which are groups in which some members are collocated and some participate remotely, had a tendency to form strong 'subgroups' rather than one cohesive group. These subgroups allocated resources and attention preferentially toward their own subgroup,

even when this led to sub-optimal outcomes for themselves and the group [2]. These subgroups did not form intentionally or even consciously for most team members. Collocated participants simply paid preferential attention to other participants across the table from them, communicating face-to-face, to the detriment of remote team members,. Remote group members, restricted to the narrower CMC channel of email, formed their own semi-exclusive subgroups (because those who were also remote paid attention to them), also sometimes to the detriment of the group.

All prior research with the experimental task used for this research was done with groups of paid undergraduate subjects, who were strangers to each other. For the present experiment we wanted to know, would groups be more resistant to 'subgroup' effects if they already knew each other and had an established shared identity? Would these 'shared identity' groups be more willing and able to act as a single cohesive unit? To test this, we recruited single-sex fraternity and sorority groups, and compared their performance with those of paid undergraduate subjects who were strangers to each other.

1.2 Related concepts: shared identity, familiarity and homophily

The test groups in these experiments actually had three related but theoretically distinct things going for them: they belonged to the same cohesive groups (shared identity); they had established relationships with each other as individuals (familiarity), and since they were both single gender groups, and since members of fraternities and sororities usually self-select into houses based on personality and other interest, the groups also had perceived similarity (homophily). In social psychology, these three are separate concepts, albeit ones that often co-occur in the real world [7, 14]. For the present experiment, we wanted to create the best chance of seeing effects in the task, so we recruited groups that seemed to have every advantage (except familiarity with the specific task.) Future experimental research could tease apart the effects of shared identity, familiarity, and homophily if desired.

1.2.1 Group efficacy

In order to take on risky or difficult challenges, group members must have confidence not just in their own skills but in the group's ability to overcome challenges, and willingness to work together. Group efficacy is related but not identical to interpersonal trust, which focuses more on one-on-one relationships within the group [6].

1.2.2 Reciprocity

Reciprocity may be an under-studied concept in distributed work. Reciprocity is the idea that there is an internal market for information, work, or other resources, and that coworkers should keep track of favors given and owed. Within a team, coworkers almost never formally keep track of favors, but most individuals keep some informal accounting. Prior analysis of the 'Shape Factory' task used in this experiment showed that, (at least in this task) reciprocity was an important factor especially for geographically remote players. Players in this task give each other resources (shapes) as a means of building relationships and expect payback in kind. Too-strong concern for reciprocity is probably detrimental to group work, however; it can limit the speed and flexibility of a group to allocate resources toward one worker's project. In the current work, we wanted to see whether group identity would affect how concerned individuals were with reciprocity specific to a particular person or were merely concerned with the good of the group.

2. METHOD

2.1 Shape Factory task

We use an experimental task called Shape Factory, which reproduces some of the dynamics of interdependent work in a laboratory setting. Specifically, the game has these dynamics of real-world workplace collaborations:

- Interdependent coworkers – Shape Factory players' specialty shapes correspond to specialty skills, and transactions are the collaborations by which skills are exchanged.
- Choice among collaborators – Since each shape is made by two players, each buyer has a choice of sellers to approach.
- Self-management – there is no formal hierarchy and players have considerable autonomy in deciding what orders to fill and what collaborators to work with.
- Unequal communication opportunities – collocated players can communicate verbally as well as through email; remote players can communicate only through email.
- Resource pressure – there are not enough shapes to fill every order.
- Time pressure – limited time in rounds creates some urgency in collaborations.

In contrast to the version of Shape Factory used in prior studies, we used a new version that does a better job of reproducing this dynamic:

- Incentives for large-scale collaboration -- Project teams that can surmount the problems of large group coordination can also reap greater rewards

Shape Factory is an online game where each player is a specialty producer of one of four to five available shapes-- circles, squares, triangles, plus' and diamonds. There are 8 or 10 players in each game, and each shape is produced by two players. Players producing the same shape can be distinguished by color (e.g. Red Triangle and Green Triangle).

Players produce their specialty shape at a cost of 10 units each, and these can either be used to fill 'orders' or to sell to other players. Players can also produce non-specialty shapes for 25 units each, but this cost is high enough that players usually try to purchase shapes from specialty producers at a cheaper price. In every round of the game, each player can produce four shapes, including their own specialty shape or others.

In Shape Factory, success is determined by payoffs earned in the game. Players have two ways to make money: by selling their specialty shapes to other players at a profit, and by assembling orders (strings of shapes) that require specialty and non-specialty shapes. In each round of the game, each player has the opportunity to try to fill two new orders. Orders represent 'projects' that a group could take on and the shapes represent different skills necessary to complete projects. Because of the production limit of four shapes per player per round of game, there are not enough shapes available in the game to fill all orders of all players, creating scarcity. To be successful, players make and maintain relationships with other players who buy their specialty shapes and produce other needed shapes. The color of a shape is irrelevant for filling orders; colors are only for telling players apart.

In experiments, players receive instructions via a PowerPoint slideshow with audio narration. Instructions are given to all players while collocated, and players play the first practice round

together. After the practice round, half of the players are dispersed to individual rooms, resulting in a configuration of four or five players collocated in a room and four or five remotes in individual rooms. All shapes are represented both in the collocated room and among the remotes. Each round of the game lasts 15 minutes and each game consists of ten rounds, including the practice round.

Players each work on an individual laptop, where they use a Web interface to play the game and to communicate with others. The game supports text-based messaging between players. Players can send simple messages, and can attach text notes to all official game transactions. Collocated players can also communicate verbally with each other. The game system must be used for all official transactions, whether or not text messages are included with them. All messages are logged and the activity in the collocated players' room is video recorded.

2.1.1 Order distribution

One variation from prior work was introduction of an accelerating payoff scheme that rewarded groups for filling longer, more difficult orders. The length of available orders varied between 2-8 shapes, and each player's orders are unique. In every round, each player receives two new orders to try to fill, one short order, which pays less per shape, and one longer order, which pays more. Figure 1 shows a typical order set available to the player 'Brown Circle' in round 10 of the game. Brown Circle can choose to fill the short order and receive 35 points (17.5 per shape) minus the cost of the shapes, try to fill the longer order and receive 180 points (25.7 per shape) minus cost, or try to fill both.

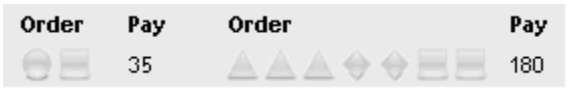

Figure 1. Example long and short order options.

By design, the longer orders are more difficult to fill: they require more shapes than any single player can produce in a round (>4), and they require fewer of the player's own specialty shape. The set of players who receive the longest orders changes in each round of the game and these changes are independent of the players' location.

Short orders are easier and safer to fill, but the payoff is less. Filling long orders is a test of collaboration. It requires a degree of trust, because some players must forego their own orders to become suppliers to other players. To fill the long order shown in Figure 1, Brown Circle would have to obtain seven shapes, none of which are her specialty shape. Filling this order will also require a degree of coordination, because even groups that may intend to cooperate may fail to redistribute shapes quickly and efficiently enough to fill long orders. Both orders and shapes expire after two rounds. Expired shapes disappear from players' inventories and their cost is not reimbursed.

Individuals working on their own or with a small number of collaborators will hit a scoring plateau that they will not be able to exceed without coordination among more players. The maximum possible average payoff for groups in this experiment is 650. Approaching this maximum requires groups to focus on filling long orders, rapidly adapt to changing circumstances as the long orders rotate among different players, and require each player to act as a supplier at times and an order coordinator at others. Groups that either focus on safer, short orders or coordinate poorly on longer orders are expected to score more poorly.

In this study each player is provided compensation in real U.S. dollars at the end of an experiment. Amounts are based on cumulative payoff earned in the game over all game rounds.

2.1.2 Participants

Data for this paper is based on 20 sessions. All sessions were intended to be run with 10 players, but some ran with fewer because of participants who did not show up. (The 8 and 9-player games use adjusted order sets for comparability.) In all we had 14 groups with all 10 participants, five with 8, and one with 9. All groups were single-gender groups. In 11 of these groups, totaling 99 people, individuals were strangers to each other before the experiment. In the other 9 'shared identity' sessions, totaling 89 participants, the individuals knew each other and were recruited as a group. One group was a sports team that also lived together; all of the other groups came from fraternity and sororities.

2.1.3 Incentive condition

For accurate disclosure, we will describe a second independent variable, which was implemented but was not analyzed further. Our experiments were originally designed to examine two variables: shared identity and group financial incentives. This paper focuses only on the shared identity variable, because the group incentive variable was complicated by some unexpected group behaviors, and had non-significant effects in any case. The incentive conditions were complicated because some of the shared identity groups made plans to share their profits with each other anyway after the experiment, even in the individual payoff condition. Of the 20 sessions we ran to date, 6 were run with individual-only payoffs (4 in shared identity groups), where every person was paid based on what they earned, and in the other 14 (7 in shared identity groups) payoff was a combination of individual earnings and a bonus based on the group average. An ANOVA test of the effect of the incentive variable showed that the effects on player score were very small, do not approach significance ($df(1,18)$, $F=.15$, $p<.70$), and do not interact with other variables of interest. For the purposes of this paper, we will disregard the group incentive variable.

2.1.4 Post-task questionnaires

After the conclusion of the game, all participants filled out on online questionnaire about the game. Appendix A lists the survey items, which measure these concepts:

Shared Identity: We used a group identity scale developed by Henry, Arrow and Carini [9] that focused on affective aspects of shared identity (e.g., "Members of this group like one another.").

Group efficacy: We developed a three item group efficacy scale based on the pattern described by Carroll [3] to measure individuals' confidence in the group. (e.g., "Despite the fact that some people were remote, we worked well together.")

Reciprocity: We adapted a 'reciprocity' scale from Perugini, et al. [12] to measure how much individuals were concerned with getting 'payback' for favors done in the game. (e.g., "I was kind and nice if others behave well with me, otherwise it was tit-for-tat.")

Individual versus group motivation: We developed two new scales, 'group' and individual' motivation to measure whether individuals were mostly pursuing group or individual goals.

3. RESULTS

3.1 Differences between shared identity group and stranger group performance

The main outcome measures for this task are (1) the total group score, which indicates each group's efficacy in filling orders, and (2) each team member's individual score, which measures personal effectiveness in filling orders and in buying and selling shapes for profit. Shared identity groups on average scored higher in Shape Factory than groups of strangers. In groups of strangers, the average player score was 399; in shared identity groups it was 453. The variance of the shared identity group scores was higher than that of the other groups, so a two-sample t-test not assuming equal variance was performed. The differences in scores was significant ($t=-2.51$, $p< 0.023$.) Examination of residuals shows an approximate normal distribution.

How did the shared identity groups achieve these higher scores? ANOVA comparison of shared identity groups and groups of strangers shows that they filled an almost identical number of orders per session (73.6 vs 73.7 per session). But the shared identity groups were able to focus efforts on the longer orders. The average order length for the shared identity groups was 4.8 versus 4.1 for groups of strangers ($F(1,18)=8.5$, $p<.01$). Shared identity groups began to fill longer orders even in earlier rounds and continued an upward trend higher on average than groups of strangers (Figure 2).

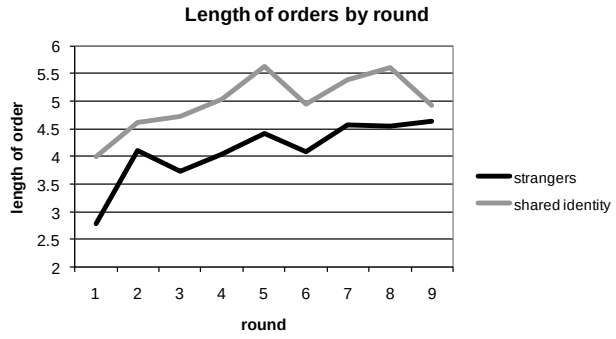

Figure 2. Length of orders by round number.

3.1.1 Effects of collocation and interaction effects

Across all conditions remote participants scored lower than collocated participants, although as will be discussed, the reasons for lower scores may be different between the shared identity and stranger conditions. A General Linear Model ANOVA was used with individual participant level data. GLM was used, rather than a simpler form of ANOVA, to control for possible session effects (one session being one particular 8 or 10 person group playing their 10 rounds). We analyzed the individual scores of participants with a model that assumed a fixed session variable nested within the shared identity condition, a fixed effect of location, and also looked for interactions between identity condition and location. The session variable was marginally significant ($F(32)=1.47$, $p<.07$). Shared identity was a significant predictor of higher score ($F(1)=4.2$, $p<.05$). Location was significant ($F(1)=18.11$, $p<.001$) with collocators scoring higher than remote players; the interaction of shared identity and location was not significant. Remote participants from the shared identity groups suffered as much as remote strangers.

The marginal significance of the main effect of shared identity on individual scores was due to the very high variance of individual scores in the shared identity condition. Some players sacrificed individual profit for their group score, selling shapes at or below cost and filling few or no orders themselves; some individuals in the shared identity condition had very high scores and some very low. For example, the lowest scoring individual across all sessions was a remote player in a shared identity group who acted as a shape broker, buying shapes and selling them to individuals filling long orders, often at a loss to himself. His final individual score was -560. The group as a whole, however, scored above the average. Because of the high variance in individual scores, we regard the previously reported comparison of group means as a truer measure of the differences in performance between the shared identity and stranger conditions.

Given that many players in the shared identity condition may have accepted low scores by choice, to understand the true dynamics at work it is important to examine what the players themselves said about the game in the post-game questionnaire.

In a questionnaire administered following each session, we used Likert item scales to collect data on individual and group-focused motivations, reciprocity, shared identity and group efficacy. We used a standard 1-5 scale with 1 being 'strongly disagree' and 5 being 'strongly agree'. For each scale we calculated reliability statistics between scale items and computed summary statistics for scales where Cronbach's Alpha was higher than 0.7. For simplicity of interpretation, and because the session level variables seemed to have almost no effect on previous analyses, we did not use the more complex GLM to control for session level effects. We ran one-way ANOVA to compare scale means between individuals in the shared identity versus stranger conditions. Results are shown in Table 1.

Table 1. Differences between stranger and shared-identity groups on post-questionnaire items.

Scale (Cronbach's alpha)	Shared identity groups mean	Stranger groups mean	F	p
Motivation by individual incentives (0.76)	2.57	3.8	72.04	<0.001
Motivation by group incentives (0.84)	4.09	3.01	89.84	<0.001
Reciprocity (0.76)	2.96	3.18	5.83	<0.017
Affective Group identity (0.78)	4.4	3.65	64.60	<0.001
Perceived group efficacy (0.78)	4.11	3.25	62.17	<0.001

The post questionnaire data show that groups with shared identity had higher ratings on measures generally associated with group effectiveness. Shared identity groups were less motivated by individual incentives and more by group goals. They were less concerned with reciprocity (fairness and payback) in exchanges of resources. They had greater affective identification with the group and had higher group efficacy. Note that these differences are not necessarily the result of interactions during the experiment, since the shared identity groups had a history of interactions before the game.

Additional analyses of interactions between items are shown in Appendix B.

The next section of analysis will focus only on participants in the shared identity condition. While there are large differences in scores and attitudes between collocated and remote participants in the other condition, those results are mostly consistent with what has been previously published [1, 2] and are less relevant to this paper.

3.1.2 Differences between collocated and remote members of the Shared Identity groups

Despite the impressive levels of coordination, trust, and group sacrifice shown by the shared identity groups, within these groups there were still detectable differences between collocated and remote team members.

In the shared identity groups, collocated team members had much higher individual scores than remotes; collocators averaged 664 versus 302 for remote players. There was also a huge trade imbalance showing a net flow of shapes from the remote players to the collocated players. Collocated players purchased an average of 45 shapes over the course of the game, versus 27 for remote players ($F(1,68)=14.3$, $p<.01$). Collocators filled significantly more orders (8.3 vs 6.1 on average, ($F(1,68)= 5.4$, $p<.023$)).

Remote players did fill some orders. But they filled smaller orders, fewer of them, and interestingly, they on average paid a much higher price for shapes when they did try to fill orders. Among the shared identity groups, the average price a remote participant paid was $14.18 per shape, much higher than the $10.84 paid by collocators. (Selling for $10 was selling at cost and was the minimum price allowed.)

These differences were not a sign of distrust or outgroup hostility, however; they were largely due to a deliberate strategy adopted by most groups, where collocated players organized and filled most of the long, high-paying orders and remote players acted as suppliers. This seemed to happen because it was easiest for the collocated players to verbally coordinate amongst themselves to choose which orders to try to fill. Remotes, by and large, went along with the decisions made in the collocated groups, and sold shapes on request to players in the collocated room. Most shared identity groups either explicitly or tacitly agreed to sell each other shapes at a low price or at cost, which meant that the remote players acting as suppliers made little or no profit.

Allowing collocators to dominate the order-filling was not an optimal strategy for the game if one focuses on the payoffs. The game was set up so that the longest, highest paying orders rotated evenly among the players. (Recall that each player had an exclusive set of available orders that varied widely round by round.) An optimal group strategy would have required the teams to identity the highest paying orders every round (orders of length 7 and 8) and rotate the order-filling duties amongst all players based on who owned those orders. The strategy most shared-identity teams adopted was basically to fill the longest orders available to the collocators, which were sometimes length 5 or 6. Though it was not optimal for payoffs, it was still good enough to significantly outperform the non-shared identity groups. If one considers the cost of communication delays and difficulties, this may have been the optimal strategy given their situation.

There is little evidence of the remote players objecting to this strategy or organizing counter-strategies. In almost every group, the remote players accepted their supplier role for the good of the group. Post survey responses indicate that the game experience was different for the remote players, however, as shown in Table 2. As before, we ran one-way ANOVA to compare scale means between individuals in the shared identity versus stranger conditions.

Table 2. Differences in post-task questionnaire scores between collocated and remote members of the shared identity groups.

Scale (Cronbach's alpha)	Shared Identity collocator mean	Shared Identity remote mean	F	P
Motivation by individual incentives	2.38	2.59	.72	ns
Motivation by group incentives	4.19	4.13	.22	ns
Reciprocity (.81)	2.61	3.2	18.81	<0.001*
Affective Group identity (.65)	4.55	4.22	7.54	<0.01*
Perceived group efficacy (.79)	4.34	4.03	4.10	<0.05*

Table 2 shows that the experience of being a remote player on a shared-identity team deviated significantly from that of a collocated player. Like their collocated teammates, remote players said they were working toward group goals, and not concerned with individual financial incentives. However, despite the high-level goals being in alignment, remote players still endorsed 'reciprocity' strategies. This means they were more in agreement with statements such as "If someone helped me fill an order, I tried to return the favor" and "If two people asked me for a shape, I favored the one who had been good to me in the past."

Remote players had less of a sense of affective or emotional group identity immediately following the experiment. This meant they less strongly endorsed statements such as "I enjoyed interacting with the members of this group." Remote players also had less perceived efficacy for the group as a whole, giving lower agreement to items such as "Despite the fact that some people were remote, we worked well together" and "Our group was good at coordinating longer orders."

4. DISCUSSION

Does shared group identity solve the problems of partially distributed teams? Data from this study shows that it has a large positive effect on collaboration, but does not completely ameliorate the problems.

Twenty groups in this study were confronted with a collaboration task that required coordination, cooperation, and some ability to sacrifice short-term profits for the longer-term good of the group.

Eleven groups were strangers; nine of the groups were sports teams, fraternities, or sorority groups that knew each other beforehand, lived together, and had a sense of shared identity coming into the experiment. These 'shared identity' groups scored significantly higher in the collaborative task.

They achieved these scores by concentrating efforts on higher-paying opportunities, (in Shape Factory, this meant filling longer 'orders') which required coordination and also required some players to sacrifice their own opportunities for profit to help others achieve their goals. In post-task questionnaires, these teams also had higher ratings of group identity, group efficacy, endorsed group goals more and individual goals less, and were less concerned about reciprocity in their transactions with other players in their group.

The real-world corollary to this is an organization that can use its collective resources more efficiently, take on and achieve more complex projects, and focus on the best collective opportunities rather than pursuing individualistic goals. These behaviors are likely to breed success in most real-world endeavors. This suggests that shared identity would be a key factor predicting success of partially distributed teams.

However, within these shared-identity groups, there were still inequities between collocated and remote members. In most of these groups, the collocators set the strategy and filled most of the groups' orders because it was easier to coordinate verbally than through the messaging system.

The remote players in these groups willingly accepted their role, for the most part, and at the end still had higher ratings of group efficacy and trust than collocators in the groups of strangers.

The remote players in this experiment did make some attempts to fill orders. They ended up paying a much higher price for the same resources, and had less overall success in filling orders. In post-surveys they reported using reciprocity strategies more ('I'll help you only as much as you'll help me'), had lower ratings of group identity, group efficacy, and trust in the group, although they were still higher on each of these measures than the control groups of strangers.

The implications of these differences between collocated and remote players are enough to cause concern. The real-world corollary would be partially distributed teams that collaborate well, but where the centrally located team members took on all the management responsibility and made most of the important decisions because it was easier to communicate. If this occurred, even when all team members had the best of intentions, the central players would end up with more management experience, and likely have better long-term career options. Remote team members with lower sense of group identity, lower group efficacy, and more concern for reciprocity might be expected to have lower morale, less loyalty to the organization, and lower retention rates.

This study does not address potential remedies, but the usual remedies for the problems of distributed teams probably apply: awareness of problem areas, frequent and intentional team building, good communication practices and an organizational culture that values all of the above.

Shared identity helps overcome problem of distance, but does not make the difficulties disappear; distance still matters.

5. ACKNOWLEDGEMENTS

This research was supported by the Army Research Institute for the Behavioral Sciences and Johns Hopkins University Applied Physics Laboratory. Stereo Interactive and Design developed the Shape Factory game and some analysis tools.

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APPENDIX A SCALE QUESTIONS

Motivation by individual incentives

- I felt I was competing with others in this game.
- My primary goal in the game was to maximize my own profit.

Motivation by group incentives

- I tried to help everyone in the group do well.
- Contributing to the group's overall profit was my main motive in the game.
- I sacrificed personal profits to help increase the overall group profit by helping other players fill longer orders.
- It is important to sacrifice personal profits if it is beneficial to the group.

Affective group identity

- I would have preferred to be in a different group that the one I was in.
- Members of this group like one another.
- I enjoyed interacting with the members of this group.
- I don't like many of the other people in this group.

Group efficacy

- Our group worked well together.
- Despite the fact that some people were remote, we worked well together.
- Our group was good at coordinating longer orders.

Reciprocity

- If someone helped me fill an order, I tried to return the favor
- I went out of my way to help players who had helped me
- If someone refused to help me, I held a grudge against them
- It annoyed me when people negotiated prices for shapes
- I was kind and nice if others behave well with me, otherwise it was tit-for-tat
- If somebody was impolite to me, I was impolite to them
- If somebody put me in a difficult position, I would do the same to him/her
- I didn't really keep track of how much I had bought or sold from specific players
- If two people asked me for a shape, I favored whoever asked first
- If two people asked me for a shape, I favored the one who had been good to me in the past
- Building relationships was the key to doing well in this game.

APPENDIX B SURVEY RESPONSE MEANS, RELIABILITY AND INTERACTIONS

Comparison of survey response items using GLM model. The model looks at effects of SI condition, location (collocator or remote) and the interaction of SI x location, while controlling for session level variables.

Scale and Cronbach's alpha reliability	Session	SI	Location	SI x location
Motivation by individual incentives (0.76)	F(32)=3.75, p<.001	F(1)=107.05, p<.001	NS	NS
Motivation by group incentives (0.84)	F(32)=2.72, p<.001	F(1)=114.08, p<.001	NS	NS
Reciprocity (0.76)	F(32)=1.92, p<.001	F(1)=5.99, p<.016	F(1)=7.27, p<.01	F(1)=11.64, p<.001
Affective Group identity (0.78)	NS	F(1)=60.86, p<.001	F(1)=18.41, p<.001	NS
Perceived group efficacy (0.78)	F(32)=4.57, p<.001	F(1)=86.61, p<.001	F(1)=4.38, p<.05	NS