

Appendix A Proofs and additional propositions

Proof of Proposition 2:

Proof. Let us first demonstrate (i). We know from Proposition 1 that conformity is an equilibrium in the complete network if $n \geq \alpha/\beta$. Similarly, conformity is an equilibrium in any network with $n(n-1)/2 - 1$ links (i.e., the complete network minus one link) if $n \geq \alpha/\beta + 1$. Since the players with one missing link would earn strictly less in the latter equilibrium (because of the missing link), it directly follows that the complete network with conformity (on either action) is pairwise stable according to Definition 1.

Let us now demonstrate (ii). We know from Proposition 1 that diversity is an equilibrium in the complete network if $|N_{up}|, |N_{down}| \geq \frac{\beta(n+1)}{\alpha+\beta}$. Let us also consider the same network with exactly one extra missing link. If this link is between two players of different types, then it follows that diversity is an equilibrium if none of those players can benefit by choosing a different action, i.e., $\alpha|N_m| \geq \beta(n - |N_m|)$, which can be rewritten as $|N_m| \geq \frac{\beta n}{\alpha+\beta}$, for any $m \in \{up, down\}$. If the link is between two players of the same type, then diversity is an equilibrium if none of those players can benefit by choosing a different action, i.e., $\alpha(|N_m| - 1) \geq \beta(n - |N_m| + 1)$, which can be rewritten as $|N_m| \geq \frac{\beta n}{\alpha+\beta} + 1$, for any $m \in \{up, down\}$. In both cases, the missing link yields strictly lower payoffs for the players unlinked with each other. It directly follows that if $|N_{up}|, |N_{down}| \geq \frac{\beta n}{\alpha+\beta} + 1$, the complete network where all players choose their preferred action is pairwise stable according to Definition 1.

Finally, let us demonstrate (iii). It is easy to see that segregation in two complete components where all players of the same component share the same type, and where every player chooses their preferred action is an equilibrium (because $\alpha > \beta$). It directly follows that such an outcome is also an equilibrium if one extra link is missing in the network (between players of the same type). However, this outcome yields strictly lower payoffs for the players unlinked with each other. Similarly, the diversity outcome is an equilibrium if there is one extra link added between two players of different types, in which case all payoffs remain unchanged (because the extra link incurs no cost). It therefore follows that

the segregation network with diversity is pairwise stable according to Definition 1.

□

Proof of Proposition 3:

Proof. Let x and y be the number of players playing *down* in N_{up} and N_{down} , respectively. The sum of individual payoffs is

$$W(x, y) = (n - x - y)(\alpha(|N_{up}| - x) + \beta(|N_{down}| - y)) + (x + y)(\beta x + \alpha y). \quad (7)$$

For fixed y , social welfare is decreasing in x if $x < x^*$ and increasing in x for $x > x^*$, where

$$x^* = \frac{\beta(|N_{down}| - 2y) + \alpha(|N_{up}| - 2y) + \alpha(n)}{2(\alpha + \beta)}. \quad (8)$$

Similarly, for any x , social welfare is decreasing in y if $y < y^*$, and increasing in y for $y > y^*$, where

$$y^* = \frac{\alpha(|N_{up}| - 2x) + \beta(|N_{down}| - 2x) + \beta(n)}{2(\alpha + \beta)} \quad (9)$$

Since $0 \leq x \leq |N_{up}|$ and $0 \leq y \leq |N_{down}|$, it follows that $W(x, y)$ is maximized for some $x \in \{0, |N_{up}|\}$ and some $y \in \{0, |N_{down}|\}$. Note that $W(0, |N_{down}|) = \alpha(|N_{up}|^2 + |N_{down}|^2)$, and $W(|N_{up}|, 0) = \beta(|N_{up}|^2 + |N_{down}|^2)$, which directly implies that $W(0, |N_{down}|) > W(|N_{up}|, 0)$ (because $\alpha > \beta$). Furthermore, since $W(0, 0) = n(\alpha|N_{up}| + \beta|N_{down}|)$, we have that $W(0, 0) > W(0, |N_{down}|)$ if and only if

$$\frac{|N_{up}|}{|N_{down}|} > \frac{\alpha - \beta}{\alpha + \beta} \quad (10)$$

This inequality holds whenever $|N_{up}| > |N_{down}|$.

Similarly, since $W(|N_{up}|, |N_{down}|) = n(\beta|N_{up}| + \alpha|N_{down}|)$, we have that $W(|N_{up}|, |N_{down}|) > W(0, |N_{down}|)$ if and only if

$$\frac{|N_{down}|}{|N_{up}|} > \frac{\alpha - \beta}{\alpha + \beta} \quad (11)$$

This inequality holds whenever $|N_{down}| > |N_{up}|$. Furthermore, note that equations (10) and (11) hold for $|N_{up}| = |N_{down}|$ as long as $\beta > 0$. To summarize, we always have that either $W(0, 0) > W(0, |N_{down}|)$ or $W(|N_{up}|, |N_{down}|) > W(0, |N_{down}|)$ as long as $|N_{up}| \neq |N_{down}|$ or $\beta > 0$.

Finally, consider the case where $x = |N_{up}|$ and $y = |N_{down}|$: this implies that $x + y = n$. Since $\alpha > \beta$, it can be shown that $W(0, 0) > W(|N_{up}|, |N_{down}|)$ so long as $|N_{up}| > |N_{down}|$. Moreover, $W(0, 0) < W(|N_{up}|, |N_{down}|)$ holds as long as $|N_{up}| < |N_{down}|$. Finally, $W(0, 0) = W(|N_{up}|, |N_{down}|)$ if $|N_{up}| = |N_{down}|$.

We now show that with endogenous interaction, social welfare is maximized under integration and conformity on the majority's action. The argument is as follows: Start from any network g and any configuration of actions x . Now add all missing links and obtain the complete network. Since $k = 0$ the aggregate payoff remains unchanged. But we know from the first part of the proof that, in the complete network, aggregate payoffs are maximized under conformity on the majority's preferred action. This completes the proof. \square

A.1 Treatment SUBSIDY

We start with the case where linking has a negative cost. We obtain the following result.

Proposition 4. *Suppose $k < 0$. Then $(\bar{g}^*, x^*(\bar{g}^*))$ is pairwise stable if one of the following conditions obtain:*

- (i) \bar{g}^* is complete and conformity obtains, $\forall i \in N, x_i^*(\bar{g}^*) = m$, where $m \in \{up, down\}$.
- (ii) \bar{g}^* is complete and diversity obtains, $x_i^*(\bar{g}^*) = \theta_i$ for all $i \in N$, and $|N_{up}|, |N_{down}| \geq \frac{\beta n}{\alpha + \beta} + 1$.
- (iii) \bar{g}^* contains two complete components, $C_u = N_{up}$ and $C_d = N_{down}$ where players in C_u choose up, while players in C_d choose down, if $|N_{up}|, |N_{down}| \geq \max(\frac{\alpha - \beta}{\beta}, \frac{\beta - k}{\alpha - \beta})$.

The proofs of (i) and (ii) are identical to Proposition 2. The proof of (iii) is however slightly different. The same action profile would still be an equilibrium if only two players of the same component were disconnected, and as a result, such disconnection is not beneficial. However, if two players of different types became connected with each other, the same action profile would still be an equilibrium, but since $k < 0$, both players adding the link would earn strictly more. Conformity on the minority's preferred action would also be an equilibrium in this alternative network (with one link added across types) if $\max(|N_{up}|, |N_{down}|) \geq \frac{\alpha - \beta}{\beta}$. In this case, the majority player adding the link would earn $(\max(|N_{up}|, |N_{down}|) + 1)(\beta - k)$. The payoff for that player in the original segregated network with diversity is $\max(|N_{up}|, |N_{down}|)(\alpha - k)$. Therefore, if $\max(|N_{up}|, |N_{down}|) \geq \frac{\beta - k}{\alpha - \beta}$, such a player would not benefit from adding a link. A similar argument shows that a minority player cannot benefit from adding a link (because the alternative network may reach conformity on the majority's preferred action). Note that the set of outcomes that are pairwise stable according to Proposition 4 ($k < 0$) are also pairwise stable according to Proposition 2 ($k = 0$). However, the reverse is not true. More specifically, *segregation with diversity* does not always hold for $k < 0$ and specific values for the parameters (see Proposition 4(iii)).

A.2 Treatment COST

Let us now consider the case with costly links. We obtain the following result.

Proposition 5. *Suppose $k > 0$. Then $(\bar{g}^*, x^*(\bar{g}^*))$ is pairwise stable if one of the following outcomes obtains:*

- (i) \bar{g}^* is a complete network and conformity obtains, $\forall i \in N, x_i^*(\bar{g}^*) = m$, where $m \in \{up, down\}$.
- (ii) \bar{g}^* is complete and diversity obtains, $x_i^*(\bar{g}^*) = \theta_i$ for all $i \in N$, and $|N_{up}|, |N_{down}| \geq \frac{\beta(n-1)+k}{\alpha}$.
- (iii) \bar{g}^* contains two complete components, C_u and C_d ; every player in C_u chooses up, while every player in C_d chooses down.

The proofs of (i) and (iii) are identical to Proposition 2. The proof of (ii) differs slightly. The same action profile (diversity) would still be an equilibrium if only two players of the same type were disconnected, and as a result, such disconnection is not beneficial. Conformity on the majority's preferred action would be an equilibrium in the alternative network where one link is deleted between players of different types. The payoff for the minority player deleting the link would then be $(n - 1)(\beta - k)$. The payoff for that player in the original complete network with diversity is $\min(|N_{up}|, |N_{down}|)\alpha - nk$. Therefore, if $\min(|N_{up}|, |N_{down}|) \geq \frac{\beta(n-1)+k}{\alpha}$, then this player does not want to delete the link. The same argument can be made for the majority player deleting the link (assuming the alternative network leads to conformity on the minority's preferred action). Note that the set of outcomes that are pairwise stable according to Proposition 5 ($k > 0$) are also pairwise stable according to Proposition 2 ($k = 0$). However, the reverse is not true. More specifically, *integration with diversity* does not hold for $k > 0$ and specific parameters.

A.3 Treatments EXOSYM and EXOASYM

Finally, we present the equilibrium analysis of the coordination game in these treatments.

Proposition 6. *Suppose $|N_{up}| > |N_{down}|$. Fix an incomplete network g in which only $|N_{down}|$ links are missing between minority and majority players, and the degree of any majority player is at least $n - 2$. Suppose x^* is a Nash equilibrium. Then the following outcomes are possible:*

(i) *conformity on $m \in \{up, down\}$ if $n \geq \alpha/\beta + |N_{down}|$.*

(ii) *diversity with every player choosing their preferred action, if $|N_{up}|, |N_{down}| \geq \frac{\beta(n+1)}{\alpha+\beta}$.*

Proof. Suppose any conformity outcome in (i). Since the number of missing links between minority and majority players is $|N_{down}|$, any player must have at least a degree $n - |N_{down}| - 1$ (lowest degree for a minority player missing all $|N_{down}|$ links). All players who select their preferred action can clearly not improve their payoff through any deviation. However, the payoff for players selecting their least preferred action is at least

$(n - |N_{down}|)\beta$. Any individual deviation from such players instead yields α . As a result, conformity is an equilibrium whenever $(n - |N_{down}|)\beta \geq \alpha$, which can be rewritten as $n \geq \alpha/\beta + |N_{down}|$.

Suppose the diversity outcome in (ii). Since the number of missing links between minority and majority players is $|N_{down}|$ and $|N_{up}| > |N_{down}|$, there must exist at least one majority player with a degree $n - 1$ (linked with everyone else). There may also be some minority player(s) with a similar degree (e.g., if some other minority player is missing more than one link). It then directly follows that any such player will earn $|N_y|\alpha$ where $y \in \{u, d\}$. Any unilateral deviation however yields $(n - |N_y| + 1)\beta$. As a result, such a player is not better off deviating if $|N_y|\alpha \geq (n - |N_y| + 1)\beta$, which can be rewritten as $|N_y| \geq \frac{\beta(n+1)}{\alpha+\beta}$. Since other players can only be less connected with the opposite type, they can also not benefit by deviating under this condition. Thus, diversity is an equilibrium. \square

The main point to note is that conformity (on *up* or *down*) and diversity both remain equilibrium outcomes under EXOSYM and EXOASYM.

Appendix B Regression tables

The data in our experiment consists of the decisions made over 20 periods by groups of 15 subjects. In each of the 6 treatments there are 6 groups, resulting in a total of 720 observations at the group level. The tables below report the results associated to random effects GLS regressions with standard errors clustered on groups.

Table B1. Effect of types on network connectivity in ENDO

Note: GLS regressions with group random effects and standard errors clustered on groups (in parenthesis). The omitted category is the MINORITY type. The dependent variable is the share of formed links by types in column I, the fraction of missing links within types in column II, the fraction of failed proposals within types in column III, and the fraction of failed proposals between types in column IV. ***, **, and * indicate statistical significance at the 0.01, 0.05, and 0.10 levels.

	I	II	III	IV
Majority	0.0119 (0.0282)	-0.0022 (0.0139)	-0.0017 (0.0077)	0.0228 (0.0312)
Period	0.0026* (0.0014)	-0.0019 (0.0015)	-0.0011 (0.0009)	-0.0023 (0.0016)
Majority × Period	-0.0003 (0.0018)	0.0005 (0.0016)	0.0004 (0.0009)	0.0004 (0.0021)
Constant	0.8917*** (0.0219)	0.0219** (0.0114)	0.0121* (0.0065)	0.0735*** (0.0105)
χ^2	7.63*	9.08**	9.26**	5.08
# Obs.	240	240	240	240

Table B2. Effect of endogenous linking on conformity: ENDO vs. EXO

Note: GLS regressions with group random effects and standard errors clustered on groups (in parenthesis). The omitted category is the treatment EXO. The dependent variable is the level of conformity the network in column I, the level of conformity of the majority in column II, and the level of conformity of the minority in column III. ***, **, and * indicate statistical significance at the 0.01, 0.05, and 0.10 levels.

	I	II	III
ENDO	-0.2931*** (0.0610)	-0.0168 (0.0117)	-0.6088*** (0.1274)
Period	0.0119*** (0.0032)	0.0019*** (0.0006)	0.0233*** (0.0067)
ENDO × Period	-0.0139*** (0.0034)	0.0003 (0.0010)	-0.0300*** (0.0069)
Constant	0.8391*** (0.0599)	0.9886*** (0.0036)	0.6681*** (0.1259)
χ^2	29.50***	18.15***	39.77***
# Obs.	240	240	240

Table B3. Effect of endogenous linking on efficiency: ENDO vs. EXO

Note: GLS regressions with group random effects and standard errors clustered on groups (in parenthesis). The omitted category in columns I and II is treatment ENDO-IF, and the dependent variable is the level of efficiency and the aggregate earnings of the minority, respectively. The omitted category in columns III to VI is treatment EXO, and the dependent variable is the level of efficiency in column III, the aggregate earnings of the minority in the first 10 periods in column IV, the aggregate earnings of the minority in the last 10 periods in column V, and the aggregate earnings of the minority in column VI. ***, **, and * indicate statistical significance at the 0.01, 0.05, and 0.10 levels.

	I	II	III	IV	V	VI
ENDO	-0.2698*** (0.0185)	-0.4625 (1.0092)	-0.2048*** (0.0415)	-0.2216 (2.0275)	0.8127 (2.2152)	0.7328 (0.9968)
Period	0.0022** (0.0011)	-0.0715* (0.0392)	0.0130*** (0.0028)	0.7266*** (0.2386)	0.3209 (0.2178)	0.4098*** (0.0593)
ENDO × Period	-0.0007 (0.0013)	0.1154 (0.0770)	-0.0115*** (0.0029)	-0.4038 (0.3299)	-0.2118 (0.2925)	-0.2228** (0.0889)
Constant	0.9067*** (0.0176)	26.9689*** (0.6117)	0.8417*** (0.0411)	27.3342*** (1.7254)	26.0825*** (1.4532)	25.7737*** (0.5909)
χ^2	215.65***	14.90***	32.76***	19.92***	2.88	58.04***
# Obs.	240	240	240	120	120	240

Table B4. Effect of types on network connectivity in SUBSIDY

Note: GLS regressions with group random effects and standard errors clustered on groups (in parenthesis). The omitted category is the MINORITY type. The dependent variable is the share of formed links by types in column I, the fraction of missing links within types in column II, the fraction of failed proposals within types in column III, and the fraction of failed proposals between types in column IV. ***, **, and * indicate statistical significance at the 0.01, 0.05, and 0.10 levels.

	I	II	III	IV
Majority	0.0062 (0.0203)	-0.0062 (0.0101)	-0.0029 (0.0053)	0.0029 (0.0271)
Period	0.0017*** (0.0005)	-0.0004 (0.0003)	-0.0002 (0.0001)	-0.0019*** (0.0006)
Majority × Period	0.0001 (0.0008)	-0.0004 (0.0007)	-0.0003 (0.0003)	0.0013 (0.0008)
Constant	0.9614*** (0.0166)	0.0141 (0.0097)	0.0074 (0.0051)	0.0267** (0.0145)
χ^2	17.93***	5.15	5.23	14.26***
# Obs.	240	240	240	240

Table B5. Effect of negative linking cost on network connectivity: SUBSIDY vs. ENDO

Note: GLS regressions with group random effects and standard errors clustered on groups (in parenthesis). The omitted category is the treatment ENDO. The dependent variable is the fraction of missing links within types for the majority in column I, and for the minority in column II, the fraction of failed proposals within types for the majority in column III, and for the minority in column IV, the fraction of failed proposals between types for the majority in column V, and for the minority in column VI. ***, **, and * indicate statistical significance at the 0.01, 0.05, and 0.10 levels.

	I	II	III	IV	V	VI
SUBSIDY	-0.0119 (0.0084)	-0.0079 (0.0149)	-0.0060 (0.0045)	-0.0048 (0.0082)	-0.0667* (0.0373)	-0.0469*** (0.0179)
Period	-0.0014*** (0.0005)	-0.0019 (0.0015)	-0.0008*** (0.0003)	-0.0011 (0.0009)	-0.0019 (0.0013)	-0.0023 (0.0016)
SUBSIDY × Period	0.0006 (0.0008)	0.0015 (0.0015)	0.0003 (0.0004)	0.0009 (0.0009)	0.0013 (0.0015)	0.0003 (0.0017)
Constant	0.0198** (0.0079)	0.0219* (0.0114)	0.0105** (0.0042)	0.0121* (0.0065)	0.0964*** (0.0294)	0.0735*** (0.0105)
χ^2	9.61**	7.70*	9.71**	6.76*	5.85	34.99***
# Obs.	240	240	240	240	240	240

Table B6. Effect of negative linking cost on conformity: SUBSIDY vs. ENDO

Note: GLS regressions with group random effects and standard errors clustered on groups (in parenthesis). The omitted category is the treatment ENDO. The dependent variable is the level of conformity of the majority in column I, the level of conformity of the minority in column II, the level of conformity in the network in column III, and the total earnings of the minority players in column IV. ***, **, and * indicate statistical significance at the 0.01, 0.05, and 0.10 levels.

	I	II	III
SUBSIDY	0.0159 (0.0126)	-0.0324 (0.0201)	-0.0066 (0.0122)
Period	0.0022*** (0.0008)	-0.0068*** (0.0019)	-0.0019* (0.0012)
SUBSIDY × Period	-0.0005 (0.0011)	0.0052** (0.0023)	0.0022 (0.0014)
Constant	0.9718*** (0.0111)	0.0593*** (0.0193)	0.5459*** (0.117)
χ^2	14.60***	18.58***	3.81
# Obs.	240	240	240

Table B7. Effect of endogenous linking on efficiency: SUBSIDY vs. EXO

Note: GLS regressions with group random effects and standard errors clustered on groups (in parenthesis). The omitted category in columns I and II is treatment SUBSIDY-IF, and the dependent variable is the level of efficiency in column I, and the aggregate earnings of the minority in column II. The omitted category in columns III and IV is treatment EXO, and the dependent variable is the level of efficiency in column III, and the aggregate earnings of the minority in column IV. ***, **, and * indicate statistical significance at the 0.01, 0.05, and 0.10 levels.

	I	II	III	IV
SUBSIDY	-0.2929*** (0.0126)	-1.6173** (0.6401)	-0.1669*** (0.0412)	5.5667*** (0.6881)
Period	0.0016*** (0.0006)	0.0532*** (0.0155)	0.0129*** (0.0028)	0.4098*** (0.0593)
SUBSIDY × Period	-0.0010* (0.0006)	-0.0417 (0.0591)	-0.0124*** (0.0028)	-0.3983*** (0.0823)
Constant	0.9677*** (0.0124)	32.9577*** (0.5341)	0.8417*** (0.0411)	25.7727*** (0.5909)
χ^2	540.83***	17.52***	30.93***	86.25***
# Obs.	240	240	240	240

Table B8. Effect of positive linking cost on network connectivity: COST vs. ENDO

Note: GLS regressions with group random effects and standard errors clustered on groups (in parenthesis). The omitted category is the treatment ENDO. The dependent variable is the fraction of missing links within types for the majority in column I, and for the minority in column II, the fraction of failed proposals within types for the majority in column III, and for the minority in column IV, the fraction of failed proposals between types for the majority in column V, and for the minority in column VI. ***, **, and * indicate statistical significance at the 0.01, 0.05, and 0.10 levels.

	I	II	III	IV	V	VI
COST	0.0150 (0.0133)	0.0950** (0.0434)	0.0076 (0.0069)	0.0461** (0.0209)	0.4825*** (0.0895)	0.4573*** (0.0767)
Period	-0.0014*** (0.0005)	-0.0019 (0.0015)	-0.0008*** (0.0003)	-0.0011 (0.0009)	-0.0019 (0.0013)	-0.0023 (0.0016)
COST × Period	-0.0027 (0.0017)	0.0004 (0.0035)	-0.0014 (0.0009)	0.0005 (0.0019)	0.0086*** (0.0028)	0.0094 (0.0078)
Constant	0.0198** (0.0079)	0.0219* (0.0114)	0.0105** (0.0042)	0.0121* (0.0065)	0.0964*** (0.0294)	0.0735*** (0.0105)
χ^2	14.52***	20.64***	14.88***	23.71***	41.49***	71.87***
# Obs.	240	240	240	240	240	240

Table B9. Effect of positive linking cost on conformity: COST vs. ENDO

Note: GLS regressions with group random effects and standard errors clustered on groups (in parenthesis). The omitted category is the treatment ENDO. The dependent variable is the level of conformity of the majority in column I, the level of conformity of the minority in column II, the level of conformity in the network in column III, and the total earnings of the minority players in column IV. ***, **, and * indicate statistical significance at the 0.01, 0.05, and 0.10 levels.

	I	II	III
COST	0.0191* (0.0116)	0.0105 (0.0379)	0.0151 (0.0196)
Period	0.0022*** (0.0008)	-0.0068*** (0.0019)	-0.0019* (0.0012)
COST × Period	-0.0006 (0.0011)	0.0051** (0.0023)	0.0021 (0.0012)
Constant	0.9718*** (0.0111)	0.0593*** (0.0193)	0.5459*** (0.0117)
χ^2	12.93***	25.99***	6.21
# Obs.	240	240	240

Table B10. Effect of incomplete (symmetric) exogenously-fixed networks on conformity: EXOSYM vs. ENDO

Note: GLS regressions with group random effects and standard errors clustered on groups (in parenthesis). The omitted category is the treatment ENDO. The dependent variable is the level of conformity of the majority in column I, the level of conformity of the minority in column II, the level of conformity in the network in column III. ***, **, and * indicate statistical significance at the 0.01, 0.05, and 0.10 levels.

	I	II	III
EXOSYM	-0.0235 (0.0311)	0.2536** (0.1291)	0.1058* (0.0622)
Period	0.0022*** (0.0008)	-0.0069*** (0.0019)	-0.0019* (0.0012)
EXOSYM × Period	-0.0093 (0.0086)	-0.0024 (0.0103)	-0.0061 (0.0075)
Constant	0.9718*** (0.0111)	0.0593*** (0.0193)	0.5459*** (0.0117)
χ^2	8.75**	19.81***	8.74**
# Obs.	240	240	240

Table B11. Effect of incomplete (asymmetric) exogenously-fixed networks on conformity: EXOASYM vs. ENDO

Note: GLS regressions with group random effects and standard errors clustered on groups (in parenthesis). The omitted category is the treatment ENDO. The dependent variable is the level of conformity of the majority in column I, the level of conformity of the minority in column II, the level of conformity in the network in column III, and the total earnings of the minority players in column IV. ***, **, and * indicate statistical significance at the 0.01, 0.05, and 0.10 levels.

	I	II	III	IV
EXOASYM	0.0027 (0.0159)	0.4581*** (0.1343)	0.2152*** (0.0688)	
Period	0.0022*** (0.0008)	-0.0068*** (0.0019)	-0.0019* (0.0012)	
EXOASYM × Period	-0.0012 (0.0016)	0.0099 (0.0112)	0.0040 (0.0054)	
Constant	0.9718*** (0.0111)	0.0593*** (0.0193)	0.5459*** (0.0117)	
χ^2	7.76*	38.35***	18.54***	
# Obs.	240	240	240	

Appendix C Instructions

All treatments:

You are participating in an economic experiment where you have to make decisions. For participating in this experiment, you will receive a minimum payment of 5€. Please, read carefully these instructions to find out how you can earn **additional money**.

All interactions between you and the other subjects take place through the computers. Please, do not talk to the other subjects or communicate with them in other way. If you have questions, raise your hand and an experimentalist will come to you to answer it.

This experiment is **anonymous**. Therefore, your identity will not be revealed to the other subjects nor theirs to you.

In this experiment, you can earn points. At the end of the experiment, those points will be converted to Euros using the following exchange rate: 50 points = 1€. You will receive your earnings in cash.

This experiment is composed by 2 identical stages. The first stage is a trial stage, it lasts 5 rounds and the points you earn will not be exchanged for Euros. The second stage is the real experiment, it lasts 20 rounds, and the points you earn will be exchanged for Euros at the end of the experiment. Next, you will be informed of the decisions to you can make in each round.

Decisions in each round

At the beginning of each round, all subjects are randomly assigned to groups of size 15. You will be in a group with the same people for an entire stage. Please, remember that the first stage is a trial stage (5 rounds), and the second is the experiment (20 rounds).

Each subject in a group is randomly assigned a symbol (**circle or triangle**) and a number (**between 1 and 15**). You will be informed about your number and your symbol at the bottom of your screen, which will not change within a stage. That is, your number and your symbol might change from the trial stage to the experiment stage, but not between the rounds of a given stage.

Specific to Treatment ENDO only:

Each round consists of 3 phases: (1) Linking, (2) Action and (3) Earnings.

Phase 1. Linking

At the beginning of the first round you will see the interaction network formed in the previous round. Naturally, in round 1 you will see an empty network. You will see your number and your type, and the numbers and types of the other subjects, as illustrated in the image below. You will be highlighted with a thicker border, to facilitate that you can identify yourself in the screen.

The first decision you make regards whom you want to propose a connection to. You can propose between 1 and 14 connections. To do so, you have to click the checkbox next to a subject's number, in the list on the right hand side of the screen. Once you checked all the proposals you want to make, click the Continue button.

A connection is formed if 2 subjects propose to each other. In Phase 2 (Action) you will interact only with the subjects to whom are connected.

Phase 2. Action

Once all subjects have made all their proposals, you will see the resulting network of

Your group, formed by 8 circles and 7 triangles:

PROPOSALS

Check the participant(s) to whom you want to propose a connection

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 15

Round 1/20 You are player **14** Continue

interactions. A line starting from you and reaching another subject represents a connection between you and the other subject. A thinner line starting from you, directed to another subject, without reaching him, represents a proposal you made to the such subject, which he did not reciprocate. Similarly, a line starting from other subject, directed to you without reaching you, represents a proposal the other subject made you but you did not reciprocate.

The red lines represent your relations, and the black lines represent the relations between the other subjects.

On the right-hand side of the screen you can choose between two actions: **up** or **down**

(you must choose one of them). Depending on your symbol and the decisions made by the subjects you linked to in the first stage, you can earn points. This is explained as follows:

Resulting network:

ACTION
Choose an action

Up
 Down

Round 1/20 You are player **14** [Continue](#)

If you are **circle** and you:

- choose **up**, you receive **4 points for each** of your connections choosing **up**
- choose **down**, you receive **2 points for each** of your connections choosing **down**

If you are **triangle** and you:

- choose **down**, you receive **4 points for each** of your connections choosing **down**

- choose **up**, you receive **2 points for each** of your connections choosing **up**

Phase 3. Earnings

In the last phase of each round you will see the points you earned given your interactions. On the left-hand side of the screen you will see the connections you formed. Those subjects choosing the same action as you will be displayed with a red border, otherwise they will have a black border. This will allow you to easily calculate the points you earn in the current round.

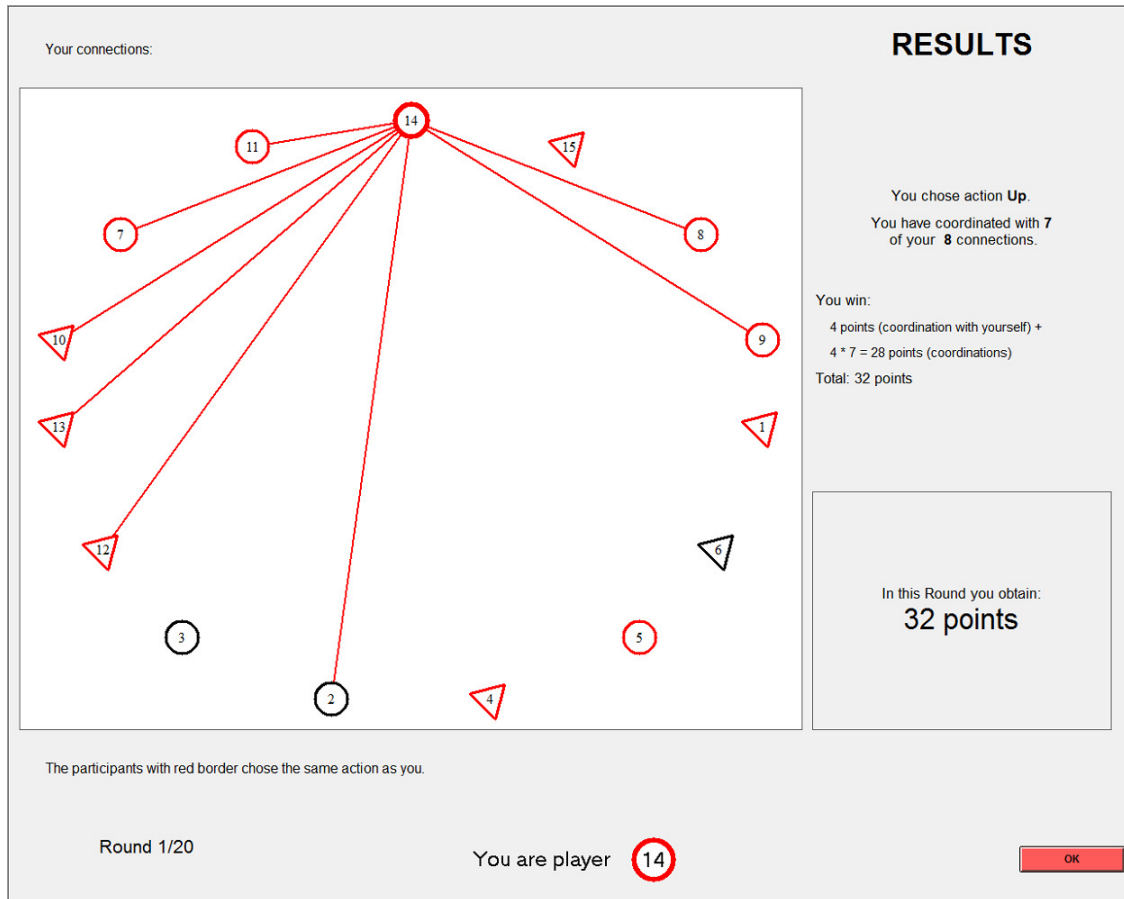
Please, bear in mind that you earn points for each subject you are linked to who chooses the same action as you (displayed with a red border). The exact amount of points (4 or 2) will depend on your symbol and the action you chose (as explained in Phase 2 (Action)).

The total amount of points you earn will be the sum of the points you obtained during the 20 rounds of the experiment (the second stage).

Next, we present two examples:

Example 1: You are a circle, you are linked to 10 subjects, you have chosen *up* and 4 of your connections have chosen *up* as well (6 have chosen *down*). Therefore, you earn 4 points for coordinating with yourself (you always coordinate with yourself), and 16 ($4 \times 4 = 16$) points for coordinating with the other 4. Your earnings in the round are 20 points in total.

Example 2: You are a circle, you are linked to 10 subjects, you have chosen *down* and 6 of your connections have chosen *down* as well (4 have chosen *up*). Therefore, you earn 2 points for coordinating with yourself (you always coordinate with yourself), and 12 ($2 \times 6 = 12$) points for coordinating with the other 6. Your earnings in the round are 14



points in total.

Specific to Treatment EXO only:

Each round consists of 2 phases: (1) Action and (2) Earnings.

Phase 1. Action

At the beginning of each round you will see the group of subjects you interact with and their choices in the previous round (in the first round you will see the subjects without any

previous decision). You will see your number and your type, and the numbers and types of the other subjects, as illustrated in the image below. You will be highlighted with a thicker border, to facilitate that you can identify yourself in the screen.

On the right-hand side of the screen you can choose between two actions: **up** or **down** (you must choose one of them). Depending on your symbol and the decisions made by the subjects you linked to in the first stage, you can earn points. This is explained as follows:

Your group in the previous round:

ACTION
Choose the action you prefer

Up
 Down

Round 2/20

You are player **12**

Continue

If you are **circle** and you:

- choose **up**, you receive **4 points for each** of your connections choosing **up**

- choose **down**, you receive **2 points for each** of your connections choosing **down**

If you are **triangle** and you:

- choose **down**, you receive **4 points for each** of your connections choosing **down**
- choose **up**, you receive **2 points for each** of your connections choosing **up**

Phase 2. Earnings

In the last phase of each round you will see the points you earned given your interactions. On the left-hand side of the screen you will see the connections you formed. Those subjects choosing the same action as you will be displayed with a red border, otherwise they will have a black border. This will allow you to easily calculate the points you earn in the current round.

Please, bear in mind that you earn points for each subject you are linked to who chooses the same action as you (displayed with a red border). The exact amount of points (4 or 2) will depend on your symbol and the action you chose (as explained in Phase 1 (Action)).

The total amount of points you earn will be the sum of the points you obtained during the 20 rounds of the experiment (the second stage).

Next, we present two examples:

Example 1: You are a circle, you have chosen *up* and 4 other subjects have chosen *up* as well (10 have chosen *down*). Therefore, you earn 4 points for coordinating with yourself (you always coordinate with yourself), and 16 ($4 \times 4 = 16$) points for coordinating with the other 4. Your earnings in the round are 20 points in total.

Example 2: You are a circle, you have chosen *down* and 10 other subjects have chosen *down* as well (4 have chosen *up*). Therefore, you earn 2 points for coordinating with

Your connections:

RESULTS

You chose action **Up**.

You have coordinated with **8** players.

You earn:

- 2 points (coordination with yourself) +
- $2 * 8 = 16$ points (coordinations)

In this Round you obtain:

18 points

The participants with a red border chose the same action as you.

Round 1/20

You are player

OK

yourself (you always coordinate with yourself), and 20 ($2 \times 10 = 20$) points for coordinating with the other 6. Your earnings in the round are 22 points in total.

All treatments:

Summary In each round, you can create connections. You will earn points from those subjects you are connected to who chose the same action as you (coordinate with you). The session consists of 2 stages, the first is a trial stage, which lasts 5 rounds, and the latter is the experiment and lasts 20 rounds. You will participate with the same 15 subjects for a whole stage (trial or experiment), but your group, symbol and number, and those of the

other subjects, might change between stages.