Supplemental Materials

Materials Pre-tests for Experiment 2

Pre-tests. To conduct the second experiment, we developed two pre-tests. The first pretest was intended to test whether the sentences implied the expected trait. The second pre-test had the goal of assuring that the material (sentences and traits) was not relevant to our power conditions (manager and employee). For both pre-tests, 129 trait-implying sentences and their correspondent traits, created in a previous pilot study (Orghian, Ramos, Reis, & Garcia-Marques, 2018), were used. For the first pre-test, we collected data from 60 native Portuguese speakers (14 males, with a mean age of 33 years old, SD = 13.72). Participants were recruited via a psych department mailing list and the pre-test was conducted online with the Qualtrics engine. The survey started with the instructions and followed with the presentation of pairs of sentences and traits. The task consisted of assessing how much the actor performing the behavior in the sentence had a certain trait on a scale from 1 (not at all) to 100 (completely). In the second pre-test, 41 Portuguese native speakers (8 males, with a mean age of 27 years old, SD = 6.57) were asked to say how plausible it was for a manager/employee to have a certain trait or to perform a certain action described in a sentence, in a scale ranging from 0 (not plausible) to 100 (totally plausible). The judgments of the traits and the sentences were presented in two different blocks.

Pre-tests analysis. First, we eliminated the sentences that on average implied the traits less than 65 points out of 100 (12 sentences). Based on the responses given in the second pre-test, we eliminated the sentences that led to a difference between manager and employee that was higher than 15 points. Following this criterion, 45 sentences were eliminated. Finally, we

selected 48 sentences from the remaining 51. For each sentence that implied a positive trait there was a counterpart sentence that implied a negative trait.

References

Orghian, D., Ramos, T., Reis, J., & Garcia-Marques, L. (2018). Acknowledging the role of word-based activation in Spontaneous Trait Inferences. *Análise Psicológica*, *36*, 115-131. https://doi.org/10.2139/ssrn.2919048

Supplemental Analysis for Experiment 3

Both presenting a trait of the same valence or of opposite valence at test comparatively to the one at study, are problematic as both approaches bring about a possible confound when comparing match and mismatch conditions (halo effect in the first case and valence-based responses in the second case). And, there is no straightforward answer to this problem. We chose to use traits of the opposite valence in the mismatch condition in order to overcome the halo effect limitation.

However, by presenting, in the mismatch condition, a trait with an opposite valence of the inferred trait in the learning phase, participants can, in theory, base their choices on the valence of traits instead of basing their answer on the specific traits that were inferred. That is, even if participants only made a generic valence-based inference about the target (and not an inference about a specific trait), they still could accept the trait in the match and reject it in the mismatch condition using only valence as a cue. This confound is particularly problematic because that is exactly the aspect that is expected to vary with the power manipulation. If there is, for example, a positive bias towards powerful people, then, regardless of the inference, there will be more false recognitions for positive than for negative traits. A possible way of detecting inferences beyond the bias is to analyze only the participants that do not show this bias.

To accomplish that, we identified the biased participants and performed an additional analysis which included only participants that had the same amount of false recognitions in the two mismatch conditions (positive and negative) in this analysis (N powerful = 37; N powerless = 46). The rational is that, as in the mismatch conditions the negative and positive traits presented at test are not associated with the actors in the photos, the difference between these two conditions should be driven by a bias based on power. So, using these answers, we can assess which participants answer in a biased manner. Namely, if positive traits are more

accepted in the mismatch powerful condition than are the negative traits, it might be due to a general positive view participants have about powerful people. Similarly, if negative traits are more accepted in the mismatch powerless negative condition than are positive traits, it might be due to a general negative view of the powerless target. Therefore, we calculated the difference between the positive and negative traits of the mismatch trials for each power target and included only the participants which difference was 0, indicating no biased responding. Next, we replicated our analysis with only said participants. We present that analysis' results below.

Powerful condition: A repeated measure ANOVA was conducted for the 37 unbiased participants, with valence and pairing being the independent variables. A main effect of valence, F(1, 36) = 5.50, p = .025, 90% CI [0.01, 0.30], $\eta^2_p = .13$, a main effect of pairing, F(1,36) = 6.06, p = .019, 90% CI [0.01, 0.31], $\eta^2_p = .14$, and an interaction between the two factors, F(1, 36) = 5.50, p = .025, 90% CI [0.01, 0.30], $\eta^2_p = 0.14$, were found. The pairwise comparisons showed a significant difference between the match (M = 0.32, SD = 0.31) and the mismatch conditions (M = 0.14, SD = 0.24) for positive traits, MD = 0.17, SE = 0.05, p = .003. For negative traits, however, the difference between match (M = 0.19, SD = 0.29) and mismatch (M = 0.14, SD = 0.24) trials was not significant, MD = 0.05, SE = 0.05, p = .376.

Powerless condition: When the same procedure was applied to the powerless condition, we ended up with 46 participants that showed no valence bias in answering. In the repeated measures ANOVA, the only significant effect found was a main effect of pairing, F(1, 45) = 6.82, p = .012, 90% CI [0.02, 0.28], $\eta^2_p = .13$ (see Figure 1). Even though, the interaction was not significant, F(1, 45) = 0.03, p = .868, 90% CI [0.00, 0.12], $\eta^2_p = .02$, simple effects analysis were conducted, as this was what we were interested in. A significant difference between match (M = 0.26, SD = 0.25) and mismatch conditions (M = 0.15, SD = 0.23), for both negative traits,

MD = 0.11, SE = 0.05, p = .031, and positive traits (match: M = 0.25, SD = 0.26; mismatch: M = 0.15, SD = 0.23), MD = 0.10, SE = 0.04, p = .021, was found.

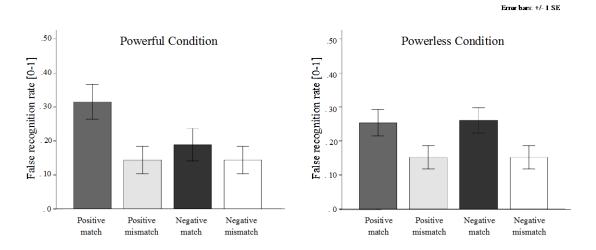


Figure 1: False recognition rate in function of the power, valence and pairing in Experiment 3, after excluding biased participants.

These results show that after eliminating the biased participants, a benevolence bias is still observed for the powerful actors (in the sense that inferences are made only for positive traits and not for negative traits) whereas for the powerless actors the lack of this bias prevails (in the sense that negative traits are inferred for these actors).

Note that by choosing only the participants who have exactly no difference between both positive and negative mismatch conditions we are pursuing a rather conservative approach. The fact that even in this scenario we find an effect is quite telling about the nature of the effect and contributes to a higher confidence in its inferential nature.

Sentences and traits used in Experiment 1 translated to English and in Portuguese (original).

(Note that some sentences are not translated literally as they are used in Portuguese phrases that are difficult to translate directly. Note also that some of them might not elicit the same trait in other cultures.)

The manager/employee/visitor made an excuse up to stay at home and not go to the New Years Eve party. Anti-social.

O director/empregado/visitante inventou uma desculpa para ficar em casa e não ir à festa de fim de ano. Anti-social.

The manager/employee/visitor couldn't admit that he was wrong. Arrogant.

O director/empregado/visitante não conseguiu admitir que afinal estava errado. Orgulhoso.

The manager/employee/visitor made everyone yawn with his story. Boring.

O director/empregado/visitante deixou toda gente a bocejar com a sua conversa. Aborrecido.

The manager/employee/visitor brought the new glasses home without breaking any. Careful.

O director/empregado/visitante trouxe os copos novos para casa sem partir nenhum. Cuidadoso.

The manager/employee/visitor stepped on his girlfriends feet while he danced with her. Clumsy.

O director/empregado/visitante pisou os pés da namorada enquanto dançava com ela. Desajeitado.

The manager/employee/visitor was praised for the excellence of his work. Competent.

O director/empregado/visitante foi elogiado pela excelência do seu trabalho. Competente.

The manager/employee/visitor didn't care about what the others thought about the way he dresses. Confident.

O director/empregado/visitante não se importou com o que os outros pensaram acerca da forma como se veste. Confiante.

That day, the manager/employee/visitor decided to try parachute jumping. Courageous.

Naquele dia, o director/empregado/visitante decidiu experimentar saltar de paraquedas. Corajoso.

The manager/employee/visitor told his friends secret to others. Disloyal.

O director/empregado/visitante contou o segredo do amigo a outras pessoas. Desleal.

The manager/employee/visitor introduced himself to everybody he didn't know as soon as he arrived at the party. Extroverted.

Mal chegou à festa, o director/empregado/visitante apresentou-se a todas pessoas que não conhecia. Extrovertido.

That day, the manager/employee/visitor walked up the stairs to the 10th floor, only not to have to use the elevator. Fearful.

Naquele dia, o director/empregado/visitante foi de escadas até ao décimo andar, só para não ter que andar de elevador. Medroso.

The manager/employee/visitor made everyone laugh out loud that night. Funny.

O director/empregado/visitante fez toda gente rir às gargalhadas naquela noite. Engraçado.

The manager/employee/visitor donated money anonymously to a charity institution. Generous.

O director/empregado/visitante da empresa doou anonimamente dinheiro para uma instituição de caridade. Generoso.

The manager/employee/visitor decided to have only two work-free days during the whole month. Hard-working.

O director/empregado/visitante decidiu ter apenas dois dias livres no trabalho durante o mês todo. Trabalhador.

The manager/employee/visitor delivered a wallet full of money he found to the police. Honest.

Certo dia, o director/empregado/visitante foi entregar à polícia a carteira cheia de dinheiro que encontrou. Honesto.

The manager/employee/visitor thought he didn't deserve the award and the commendation he received. Humble.

O director/empregado/visitante achou que não merecia o prémio e o louvor que recebeu. Humilde.

The manager/employee/visitor didn't know that the seasons depend on the movement of the Earth. Ignorant.

O director/empregado/visitante não sabia que as estações do ano dependem do movimento da Terra. Ignorante.

The manager/employee/visitor was fired because he delivered an incomplete and bad project to the client. Incompetent.

O director/empregado/visitante foi despedido porque entregou um projecto mal feito e inacabado ao cliente. Incompetente.

The manager/employee/visitor was afraid that the new work colleagues wouldn't like him. Insecure.

O director/empregado/visitante teve receio que os novos colegas de trabalho não gostassem de si. Inseguro.

The manager/employee/visitor finished his first degree on calculus when he was twelve. Intelligent.

O director/empregado/visitante tirou o primeiro curso sobre cálculo matemático quando tinha doze anos. Inteligente.

The manager/employee/visitor was drinking the whole night, even knowing that he was going to drive. Irresponsible.

O director/empregado/visitante esteve a beber a noite toda, mesmo sabendo que ia ter que conduzir. Irresponsável.

The manager/employee/visitor spent the day laying on the couch watching TV. Lazy.

O director/empregado/visitante passou o dia todo deitado no sofá a ver televisão. Preguiçoso.

That day, the manager/employee/visitor told his wife he would work until late but he was going out with his friends. Liar.

Certo dia, o director/empregado/visitante disse à mulher que ficava a trabalhar até tarde, mas foi sair com os amigos. Mentiroso.

The manager/employee/visitor supported his football team even after several consecutive losses. Loyal.

O director/empregado/visitante apoiou a sua equipa mesmo depois de várias derrotas consecutivas. Leal.

The manager/employee/visitor values and uses new technologies. Modern.

O director/empregado/visitante valoriza e usa as novas tecnologias. Moderno.

The manager/employee/visitor started to sweat as soon as he heard someone calling his name. Nervous.

O director/empregado/visitante começou a suar mal ouviu chamar o seu nome. Nervoso.

The manager/employee/visitor invited his new colleague to dine at his place. Nice.

O director/empregado/visitante convidou o novo colega de trabalho para jantar em sua casa. Simpático.

The manager/employee/visitor continued using the typewriter refusing to use the computer. Old-fashioned.

O director/empregado/visitante daquela empresa continuou a utilizar a máquina de escrever recusando-se a utilizar computador. Antiquado.

The manager/employee/visitor laid back on his armchair with a tea while listening to his favorite song. Relaxed.

O director/empregado/visitante recostou-se na poltrona com um chá a ouvir a sua música favorita. Relaxado.

The manager/employee/visitor verified if everyone had the seat belt on before starting driving. Responsible.

O director/empregado/visitante verificou se todos tinham os cintos de segurança colocados antes de arrancar. Responsável.

The manager/employee/visitor left the dinner before thanking the host. Rude.

O director/empregado/visitante saíu do jantar sem agradecer ao anfitrião. Mal-educado.

The manager/employee/visitor didn't lend his extra tie to his colleague. Selfish.

O director/empregado/visitante não emprestou a gravata que tinha a mais ao colega. Egoísta.

As he didn't know everybody who was at the meeting, the manager/employee/visitor didn't say a word the whole afternoon. Shy.

Como não conhecia as pessoas que estavam no encontro, o director/empregado/visitante não disse nada a tarde toda. Tímido.

The manager/employee/visitor paied 200 euros for a shirt. Spender.

O director/empregado/visitante pagou 200 euros por uma camisa. Gastador.

The manager/employee/visitor bought his clothes and shoes on sales. Thrifty.

O director/empregado/visitante comprou as suas roupas e sapatos em períodos de saldos. Poupado.

The manager/employee/visitor started eating only after the employee brought everyone's plates. Well-mannered.

O director/empregado/visitante apenas começou a comer quando o empregado trouxe os pratos de toda a gente. Educado.

Instructions for Experiment 1 and 2 translated to English. The instructions in the two studies differ only in the part where we mention the visitor.

"Hi.

Thanks for taking part in this experiment.

You are about to take part in a memory experiment that is conducted with the goal of understanding how humans process and memorize information about the enterprise world.

Thus, you will be presented with information about people that work in a marketing company. Please press the space bar to continue.

In labor contexts, it is usually possible to distinguish two kinds of workers that interact in different kinds of tasks.

Managers: people who decide what must be done;

Employees: people that execute the tasks defined by the managers.

Visitors: people that are, for one or another reason, visiting the company but are not included in these power relations as they are not part of it. (Study 1 only)

Please press the space bar to continue.

Therefore, being the manager of a company means having many people working within their purview. This specific company provides a diversity of products to the consumer and the manager's role is to distribute the workload to the employees, defining goals for the team, approving new project proposals and accepting or rejecting new costumers. The manager also defines the salary of the employees. The manager knows his work very well, makes all the important decision for the company and therefore, is the person that has the most power in the company.

Being an employee in this company means working in a team with lots of other people. The employee's role is to execute all the tasks to him/her assigned by the manager and follow orders regarding the goal of the team defined by the manager. The employee must write reports and prepare the necessary paperwork, once accepted by the manager, to be handed to new clients. The employee knows his work very well and follows the procedures predefined by the manager. The employee's salary is defined by the manager. The employee doesn't have much power in the company.

There is still a third type of person that might be, at a point in time, at a company even if this person is not part of it - a visitor.

Naturally, the visitor has none of the roles mentioned above, as (s)he is not part of the company. A visitor, be it a relative of someone who works in the company or someone who comes in to ask for directions is unconcerned to this type of matters; is not related to the company and its relations are irrelevant for him/her. So, the visitor not only does not take part in the company's actions as also does not interact with the manager, clients or other workers. (Study 1 only)

Please press the space bar to continue.

There are other differences between managers, employees *and visitors (study 1 only)*. For instance, managers often work in their own individual office. Next, we show you an example of such office.

Please press the space bar to continue.

Whereas employees often work in a shared office. Next, we show you an example of such office.

Please press the space bar to continue.

And a visitor normally waits at the reception. Next, we show you an example of a company's reception area.

Please press the space bar to continue. (Study 1 only)

You will be presented with photographs of managers and employees (and visitors; study 1 only) from this company. Each photo is accompanied by a sentence that is about the person in the photo.

Your task is to memorize all the information you'll be presented with.

After this memorization phase, there will be a test to your memory about this material.

Please press the space bar to start the practice trials."

Sentences and traits used in Studies 2 and 3 translated to English and in Portuguese (original).

This year the manager/employee spent a month travelling in Latin America by himself. Adventurous.

Este ano, o director/empregado passou um mês a viajar sozinho na América Latina. Aventureiro.

The manager/employee couldn't sleep the whole night because he was travelling the next day. Anxious.

O director/empregado não conseguiu dormir nada a noite toda porque ia viajar no dia seguinte. Ansioso.

The manager/employee made everyone yawn with his story. Boring.

O director/empregado deixou toda gente a bocejar com a sua conversa. Aborrecido.

The manager/employee said he was against nepotism and when he got a job offer at the mayor's office because of his cousin he refused it precisely for being against it. Coherent.

O director/empregado disse que era contra cunhas e quando um primo lhe ofereceu um trabalho melhor na câmara ele recusou-o por isso mesmo. Coerente.

The manager/employee was praised for the excellence of his work. Competent.

O director/empregado foi elogiado pela excelência do seu trabalho. Competente.

The manager/employee spend a whole afternoon looking at the sea. Contemplative.

O director/empregado passou uma tarde inteira a olhar para o mar. Pensativo.

The manager/employee said he was available to collaborate with the neighbors to solve the lift problem. Cooperating.

O director/empregado disse que estava disponível para colaborar com os vizinhos na resolução da questão do elevador. Cooperante.

The manager/employee wanted to know how the stars were formed. Curious.

O director/empregado quis saber como se formam as estrelas. Curioso.

The manager/employee moved alone and since the move it has been 3 months without calling his parents. Disengaged.

O director/empregado foi viver sozinho e desde então já lá vão 3 meses sem ligar aos pais. Desligado.

The manager/employee gave too little change to his colleague, as if he was mistaken, in case he didn't notice. Dishonest.

O director/empregado deu troco a menos ao colega, como quem se tinha enganado, para ver se ele não notava. Desonesto.

The manager/employee overtook three people in the queue without asking for the permission of any of them. Disrespectful.

O director/empregado passou à frente de três pessoas da fila sem pedir autorização a nenhuma. Desrespeitador.

The manager/employee told people exactly what he thought they wanted to hear. Fake.

O director/empregado disse às pessoas exactamente aquilo que achou que elas queriam ouvir. Falso.

The manager/employee told his friend to not give up on his work and highlighted his strengths. Encouraging.

O director/empregado disse ao amigo para não desistir do trabalho mostrando-lhe os seus pontos fortes. Encorajador.

The manager/employee was doing two tasks at the same time and managed to get good results in both. Efficient.

O director/empregado estava a fazer dois trabalhos ao mesmo tempo e conseguiu bom resultado em ambos. Eficaz.

The manager/employee became red when he found out that his colleague had had a better evaluation than him. Envious.

O director/empregado ficou todo vermelho quando soube que o colega tinha tido melhor avaliação do que ele. Invejoso.

The manager/employee gesticulated a lot and talked almost without breathing telling the adventures of his trip to Asia. Enthusiastic.

O director/empregado gesticulava muito e falava quase sem respirar ao contar as aventuras da viagem à Ásia. Entusiasmado.

The manager/employee found it hard to fall asleep at night after the horror movie. Fearful. O director/empregado teve dificuldades em dormir à noite a seguir ao filme de terror. Medroso.

The manager/employee didn't manage to be still for more than two minutes, he started moving his feet and hands right away. Fidgety.

O director/empregado não conseguiu estar parado mais do que dois minutos, começou a bater o pé e a mexer as mãos. Irrequieto.

The manager/employee valued his friends clothes brand highly. Superficial.

O director/empregado deu muito valor à marca das roupas do amigo. Fútil.

The manager/employee told the cashier that he had given him too much change. Honest.

O director/empregado disse ao director/empregado de caixa que ele lhe tinha dado troco a mais. Honesto.

The manager/employee looked bad because he delivered an incomplete and badly done project to the client. Incompetent.

O director/empregado ficou mal visto porque entregou um projecto mal feito e inacabado ao cliente. Incompetente.

The manager/employee is always correcting others on their eating habits but then he is always eating fried food. Inconsistent.

O director/empregado está sempre a corrigir os outros quanto aos seus hábitos alimentares mas depois só come fritos. Inconsistente.

The manager/employee listened attentively and made several questions during the presentation. Interested.

O director/empregado ouviu atentamente e fez várias perguntas durante a apresentação. Interessado.

The manager/employee had a fight with his girlfriend because she greeted a guy on the street. Jealous.

O director/empregado discutiu com a namorada por esta ter cumprimentado um rapaz na rua. Ciumento.

The manager/employee decided to forget about his friend harming him before and give him a second chance. Kind.

O director/empregado decidiu esquecer que o amigo o prejudicou anteriormente e dar-lhe uma nova oportunidade. Bondoso.

The manager/employee misrepresented the truth despite not having any reason to do so. Liar. O director/empregado deturpou a verdade apesar de não ter qualquer motivo para isso. Mentiroso.

The manager/employee spent New Year's Eve with his cat. Lonely.

O director/empregado passou a passagem de ano com o seu gato. Solitário.

The manager/employee purposely harmed his neighbor just because he liked to see him suffer. Mean.

O director/empregado fez de propósito para prejudicar o vizinho só porque gosta de o ver mal. Cruel.

The manager/employee found himself sighing when thinking of the past. Melancholic.

O director/empregado deu por si a suspirar ao pensar no passado com saudade. Melancólico.

The manager/employee has a blog, several YouTube channels and is up to date with the technological advances. Modern.

O director/empregado tem um blog, vários canais de youtube e está bastante a par dos avanços tecnológicos. Moderno.

The manager/employee was in favor of the marriage between people of the same sex. Open-minded.

O director/empregado mostrou-se a favor do casamento entre pessoas do mesmo sexo. Aberto.

Even given that his club did badly during this term, the manager/employee still thinks they can win. Optimistic.

O director/empregado, mesmo face à má época do seu clube, ainda acha que podem ter uma vitória. Optimista.

The manager/employee waited for his wife for more than 30 minutes without being mad at her for the third time in a row. Patient.

O director/empregado, pela terceira vez consecutiva, esperou pela mulher mais de 30 minutos sem se zangar com ela. Tolerante.

The manager/employee no longer talks to his friend because of 20 cents he owns him. Petty. O director/empregado cortou relações com o amigo por causa de 20 cêntimos que este lhe devia. Mesquinho.

The manager/employee arrived at the meetings location a couple of minutes before the scheduled time. Punctual.

O director/empregado chegou ao local da reunião uns minutos antes da hora combinada. Pontual.

The manager/employee made a fuss during the meal just because someone stepped on him at the restaurant. Quarrelsome.

O director/empregado criou logo um escândalo durante a refeição só porque o pisaram no restaurante. Conflituoso.

The manager/employee refused to assist a client because of the color of his skin. Racist.

O director/empregado recusou atender um cliente por causa da sua cor de pele. Racista.

The manager/employee didn't smoke at home while his flatmate tried to quit smoking. Respectful.

O director/empregado não fumou em casa enquanto o seu colega de casa tentava deixar de fumar. Respeitador.

The manager/employee left the dinner without thanking the host. Rude.

O director/empregado foi embora do jantar sem agradecer ao anfitrião. Mal-educado.

The manager/employee built a pyramid out of cards with 50cm of height without letting any card fall. Skilful.

O director/empregado construiu uma pirâmide de cartas com 50 centímetros sem deixar cair nenhuma carta. Habilidoso.

The manager/employee introduced himself to everyone he didn't know as soon as he arrived at the party. Sociable.

O director/empregado, mal chegou à festa, apresentou-se a todos as pessoas que não conhecia. Sociável.

The manager/employee asked something he knew before hand to test if his friend knew it. Sly. O director/empregado perguntou algo que sabia de antemão para testar se o seu colega sabia. Manhoso.

The manager/employee didn't speak to his friend the whole day just because he didn't agree with him. Spoiled.

O director/empregado não falou o dia todo com o amigo só porque este não concordou com ele. Mimado.

It was suggested he use a better technique but the manager/employee continued doing things his way just because. Stubborn.

Sugeriram-lhe que usasse uma técnica melhor, mas o director/empregado continuou a fazer as coisas à maneira dele só porque sim. Teimoso.

The manager/employee paid for the meal of the stranger who came after him to give him his jacket he had forgotten in the subway. Thankful.

O director/empregado pagou a refeição ao desconhecido que veio atrás dele para lhe dar o casaco de que se tinha esquecido no metro. Agradecido.

The manager/employee tidied up the whole room before leaving. Tidy.

O director/empregado, antes de sair de casa, arrumou o quarto todo. Arrumado.

The manager/employee didn't share what his colleague told him about his father's past in prison with anyone. Trustable.

O director/empregado não partilhou com ninguém o que o colega lhe contou acerca do passado do seu pai na prisão. Confiável.

The manager/employee showered in 10 minutes and still made it before the scheduled time to the dinner. Quick.

O director/empregado tomou banho em 10 minutos e ainda chegou antes da hora marcada ao jantar. Rápido.

Instructions for Experiment 3.

"Welcome to this study!

This study's goal is to investigate how we memorize information about people in different

locations of communication networks.

For that, in each trial, we'll show you a sentence corresponding to an action coupled with a

picture of the person who performed that action. That person can be in different locations in a

communication network.

Your task is to memorize them as well as you can because later, in a testing phase, your memory

will be tested.

Please press the space bar to continue.

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Communication Networks

Communication networks represent the way how information is shared in a specific group.

Normally, on these networks there are various nodes that symbolize different people. And there

are several lines that symbolize the relationship between several people.

In these networks, it is common that different nodes (people) transmit and receive different

quantities of information. Namely, it is common that some people receive and transmit more

information than others.

So, the position in a communication network defines the quantity of information that passes by

each node of the group and the control those nodes have over the information.

Please press the space bar to continue.

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Note that much more information passes by the central node than by the peripheral nodes.

These node (person) is directly connected to many more nodes (people) of the network than

any of the other nodes and, therefore, has access to more information. The same can't be said

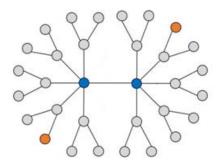
about the more peripheral nodes which depend on the central one to communicate with each other.

Inclusively, in order for the information to circulate between nodes in opposing points it has to pass by the central node. If this node does not transmit the information, the majority of the nodes doesn't communicate. Therefore, this person constitutes the most important node in what concerns the information that is communicated to the other nodes, being the most privileged one in regarding the information it received. So, this node has got much more control over the network.

Next, we'll show you a communication network. Please, study it well and read the text that accompanies it carefully.

Please press the space bar to see the example.

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In this network, there are clearly two central nodes that have a superior priority over any other node in what concerns the information they transmit to the other nodes. These are the central blue nodes. In turn, the orange nodes are two of the nodes that have the least priority over the information flow.

Please press the space bar to continue.

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Next, we'll show you sentences regarding behaviors of several people.

These people can be in a more or less central position, with more or less control, just like in the network presented previously. The pictures can appear in the central node or in one of the more peripheral nodes. They won't appear in the middle layer nodes.

The network you'll see will be different from the one you have seen before, but the structure will be the same: central nodes (only one) and several peripheral ones.

Your task is to memorize the sentences, the pictures and the place in the network where the person is in the network, the best you can, noting if the person is on the central node or on one of the peripheral ones. You do not need to memorize in which specific node the person is, you only need to memorize if it is the central one or one of the peripheral ones.

Later your information for this will be tested.

Please press the space bar to continue.

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Let's start with some practice trials. Their point is to habituate you to the task.

Each pair of photograph and sentence will be in the monitor for some seconds (enough to read and memorize the material) and then they will disappear and a new picture will appear, perhaps in a new location of the network. Your task is solely to pay attention and memorize the behavior associated to the face and network location. Later, your memory for these three aspects will be tested.

If you have any questions, we ask you to please, ask it now to the experimenter before you start. Otherwise, please press the space bar to start the practice trials."

End.

Note

Please note that the communication network presented to the participants during the study looked like this:

The images of the actors' faces appeared inside the central node or inside one of the (eight) outer layer nodes.