

**How Does Synchronous Movement Inform Social Perception? Researching the Impact
of Observing Synchrony on Offline and Online Liking**

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PSB3E-BT15: Bachelor Thesis

2122_1b_02

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April, 2022

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Abstract

Research have shown that synchrony effects how much people like other individuals. However, most research has been conducted on participants partaking in the synchronous activity. Therefore, our research aims to investigate if only watching synchronous performance can have the same effects as partaking in it. We hypothesis that people will like the group if they were moving in synchrony than if they were removing asynchronously. A survey was given out that included a scale measuring liking and online liking behavior and based on the results we found that people did in fact like the group more when they were moving in synchrony rather than if they were moving asynchronously. In conclusion, watching synchronous performance can indeed induce liking and online liking behavior in others.

Keywords: liking, synchrony, asynchrony, dance, social media.

How Does Synchronous Movement Inform Social Perception? Researching the Impact of Observing Synchrony on Offline and Online Liking

This pandemic, especially the lockdowns, has left people with barely anything to do. Confined to their own houses most of the time many people will succumb to browsing social media or video streaming platforms. Inside the online world we can find many things to entertain ourselves with, including watching dance performances or dance videos. There are a vast amount of dance videos being posted because of the trends going around on platforms such as tik tok and Instagram. People are racing to create their own trendy dance moves which are then copied by millions of people around the world. Some viewers might even like the dance group that they see and maybe give the video a “like”. This is the center of the investigation that is going to be carried out. Can dance performances that move in synchrony cause people to like the group in an online and offline setting?

Liking is a difficult term to define as most researchers do not agree on a singular definition. Some researchers define it as “the cognitive aspect of attraction” (Veskler & Eden, 2017, p. 643). However, for the purpose of this research liking will be conceptualized by joining measures of connectedness, closeness, and similarity to form a measure called “emotional connection” (Wiltermuth, 2012, p. 82). In addition, synchrony also has different definitions but for this research we will be focusing on the one that relates to the same coordinated movements that are done at the same time by a group of people (Hove & Risen, 2009). Being in synchrony has many benefits, some of them being gaining “positive, prosocial emotions” and also experiencing “collective joy” (Wiltermuth, 2012, p. 79). This would in return increase wellbeing and success in the activities that they do together. Apart from gaining peoples likes it also benefits them in some way or another.

Research also supports the idea that there are positive implications of moving in synchrony. Risen (2009) mentioned that people tend to like the experimenter in the study

more when they were both moving synchronously together rather than when they were moving asynchronously. Another study conducted by Trainor & Cirelli (2015) also found that when two adults move synchronously with another to music, they reveal that they like one another more than when they were moving asynchronously. In addition, Ravreby, Shilat, & Yeshurun (2021) found that when two people liked each other they tend to move more synchronously together when they interact, therefore a positive social bond is formed. This particular study is relevant because it argues the fact that when two people participate in synchrony they experience a form of liking, whether the liking has already formed before or it formed due to the synchronized movements, nevertheless, liking was induced. Therefore, to circle back to the research being conducted these findings pave way for us to investigate if synchrony influences liking and online liking behavior from only observing the synchronous performance.

All the research mentioned above involves participants physically partaking in the synchronous movements. What happens if participants merely watch? Will the effects also transfer to the audience, or does it only apply to people taking part in synchronous movement? According to the theory of self- other merging people that have a close interpersonal relationship can form a “you are part of me” mindset (Paladino et al., 2010, para. 1). Paladino et al. mentioned that after completing a task participants were asked to choose a drawing that represented their relationship with an in-group member. They selected drawings where two circles (which represented the self and the other person) were either close or overlapping. This could possibly mean people have been able to connect to another person without knowing them on a personal level or partaking in synchronous movement themselves. Another study by Van Mourik Broekman et al., (2015) mentions that audience members are able internalize the same things the dancers do on stage, which allows them to feel that they are closer to the dancers but only if the dancers are showing solidarity. With this being said it

is not entirely impossible for the audience to experience the same liking effects as the members of the dance group when the dance group performs synchronously.

It would be quite interesting to see if liking within the dance group transfers onto the audience. This study will therefore hypothesize that people who watch a synchronous performance will like the group members more than if they watch an asynchronous performance. For this hypothesis liking also includes online liking through social media platforms as well.

Methods

Exclusion Criteria

Prior to conducting our statistical analysis, 96 of our 237 respondents were removed from the data set. Firstly, we removed respondents based upon ethical criteria: respondents under the age of 16 (1), respondents who found the video offensive, disturbing or inappropriate (22) and respondents who did not agree to their data being used (6). Secondly, based upon technical criteria: respondents who had difficulties with their audio or video (28). Thirdly, based upon respondents' perceptions of our conditions: respondents who did not perceive the synchrony (2), or asynchrony (28), corresponding to their condition were excluded. Lastly, based upon manner of completion: respondents who did not follow our clear instruction to fill in "strongly disagree" on prosocial question 6 were assumed to be not following our instructions and were excluded (23). 15 respondents were further excluded for not completing the questionnaire, 9 of whom quit before they had viewed the video, and 6 after viewing.

Participants

Our sample consisted of 141 participants (109 female and 32 male, age range 17-x, $M_{age} = 21.22$, $SD_{age} = 2.84$). Age distributions were comparable between both conditions. Our sample was diverse in terms of nationality, with the most frequent nationalities being Dutch,

German and Bulgarian which together accounted for roughly 60% of our sample. Participants were randomly assigned to one of two conditions: asynchrony condition ($n = 83$), synchrony condition ($n = 58$).

Materials and Procedure

After having obtained ethical approval from the Ethical Committee of the University of Groningen, the researchers obtained participants through social media advertisements, personal networking, and SONA. SONA is a credit-based system that rewards students with study credits for participation in psychological research, our participants received 0.5 SONA credits for their participation. The survey was conducted online via Qualtrics (Qualtrics, Provo, UT). Participants were informed about their rights and asked for their consent before being introduced to the study with a welcome text. They were then asked to indicate their nationality, age, and gender. The full questionnaire is available within the appendix.

Participants were randomly assigned to watch a video of either a synchronized, or an asynchronized dance performance (a hip hop type of dance routine that included some pop music in the background). The videos in both conditions showed a dance group consisting of the same five dancers, in the same setting, with the same music, and same clothes. Both videos were 59 seconds long, participants were asked to watch it only once and without paying attention to anything in particular. After watching the assigned video, participants were presented with items concerning their affect, belonging, prosocial behaviour towards the dancers, and liking of the dancers¹.

How much the participants liked the group was measured using four items adapted from Wiltermuth (2012; single item) and Rubin's (1970; three items from their 13-item scale,

¹ The premeasures personality trait using the Ten Item Personality Measure (TIPI; Gosling, Rentfrow & Swann, 2003) and cultural orientation using the individualism/collectivism scale (Kim & Cho, 2011) are not relevant to the current research and are therefore not included in this paper. In addition, the following items and their scales were not relevant to my investigation therefore were not included in the text: PANAS; the positive and negative affect schedule (Watson, Clark & Tellegen, 1988), Need Threat Scale (Van Beest & Williams, 2006) and prosocial behavior originally created by Caprara et al. (2005).

Cronbach's $\alpha = 0.80$). The participants then had to rate statements, such as, "I like the dance group that I just watched" and choose on a 7-point Likert scale that ranged from "strongly disagree" to "strongly agree".

Afterwards, a couple of questions regarding participant's willingness to use social media to like the content (the video of the dance crew) were introduced. These questions were related to their intention to engage in online liking behaviours such as commenting, liking, or bookmarking the video of the dance crew. An example is "If I see the video on social media, I would give it a like", Cronbach's $\alpha = 0.74$.²

Next, because some of the dance moves could have been perceived as offensive by some of the individuals a few statements followed to assess whether someone felt offended or disturbed by the video. These questions were included because they were meant to make sure to not obscure any effect from the participant being offended. For instance: "I felt disturbed by the video". Subsequently, a manipulation check was presented to measure whether some of the participants did not perceive the video correctly and therefore to be excluded from the final analysis of the results. This was measured by asking the participants whether the dance crew moved in synchrony, which they could "yes", "no" or "I don't know". To assess this further they were requested to indicate how much they agree with the following statement: "The dancers in the video moved in synchrony". They rated this question on a seven-point Likert scale ranging from 1 (strongly disagree) to 7 (strongly agree). There were also questions to check whether the participant's managed to watch the whole video and if they watched it with sound, seriousness check and the attention check were also included. In the end, there was an additional opportunity for participants to write comments and give feedback

² Originally five items were used to measure engagement in online social behaviors, however two items were not related to my research and were omitted. The questions omitted lean more towards prosocial behaviors and not personal liking.

about the study. And lastly, people were debriefed about the true purpose of the research and were asked to not discuss this information with other prospective participants.

Results

Firstly, the data was analyzed using an independent sample t-test with the mean of liking and the categorical variable synchrony versus asynchrony. Secondly, an analysis was conducted for the social media variable also using an independent sample t-test with the categorical variable being synchrony versus asynchrony. The social media means had a right skew in the histogram; therefore, the means were transformed using log10 (which will be explained further under “Online Liking through Social Media”). The descriptive statistics of the necessary variables used in the analyses are shown in Table 1.

Table 1

Descriptive Statistics for all relevant variables

Variables	Conditions			
	Asynchrony		Synchrony	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Liking	4.02	1.16	4.58	0.86
Online Liking	2.66	1.17	3.24	1.33
Online Liking {log10}	0.38	0.21	0.47	0.20

Liking

In line with the hypothesis participants liked the group more when the group was moving in synchrony $M = 4.48$, $SE = 0.13$ compared with when the group was moving asynchronously, $M = 4.02$, $SE = 0.13$. The independent sample t-test concluded that the results were indeed significant with, $t(137) = -3.06$, $p = .007$, $d = -0.53$.

Online Liking through Social Media

When the distribution plots were computed for the original social media means there was a right skew in the histogram. Therefore, the means were transformed with the log10 function to increase normality of the distribution. There was a difference between the two conditions where the participants saw a synchronized performance on online liking via social media $M = 3.24$, $SE = 1.33$ compared to the asynchronous performance $M = 2.67$, $SE = 1.17$. The results of the independent sample t-test with the transformed means that yielded non-significant results were $t(137) = -2.58$, $p = .011$ $d = -0.45$.³

Discussion

Our findings show that people indeed tend to like the group more if the group were moving synchronously than if they were moving asynchronously. A possible explanation for this is that the participants merged the representations of themselves with those of the group allowing them to like the group more because they were moving in synchrony. Therefore, there seems to now be evidence that the self-other merging theory might be on to something as significant results were found during our study (Paladino et al., 2010).

Even in an online setting, liking behavior through social media also showed that participants would be willing to give the synchronous dance group a like compared to the asynchronous dance group.

Theoretical and Practical Implications

In line with the hypothesis that liking was present more in the synchronous movement condition compared to the asynchronous condition. There is now evidence that not only does it affect people who are participating in the synchronous movement itself but also to people merely watching the movements. From the previous research done by Risen (2009) the study was conducted with the experimenter and the participant in the synchrony condition, where they had to move in synchrony with each other. This is a relevant point because in our study

³ An analysis was also conducted with one outlier omitted. The results did not change.

there was no prior connection or even any connection at all between the dance crew and the participants. This means that for the study conducted by Risen (2009) liking was more probable anyways through self-other merging since the experimenter and participant had a connection already through the introduction of the study and debriefing etc. (Paladino et al., 2010). Therefore, our study does show that it is indeed possible for liking to take place with strangers and people who merely watch synchronous movement as no prior connection was made beforehand.

Since there is now evidence that people moving in synchrony can induce liking in others, personal trainers can use this to make exercise videos that include a group of people moving in synchrony. Synchronous movement has been used widely in the fitness world, which goes to show how important it might be. This has already been shown in certain aerobics and yoga videos where there are more than one person participating in the synchronous movement. As our results show synchrony can indeed induce liking towards the group maybe that is the reason why more than one person is used in aerobic and yoga videos.

Not only can it be used in the fitness world, but content made for schools can also include synchrony to boost liking in children watching it. This could be a great option for them to learn especially in much younger students who cannot focus for too long on text or literature. Providing educational videos that include synchrony whether it be with a dance crew or animals moving in synchrony can be beneficial for young students.

An important topic to be addressed is social media use in youth and how that is related to the findings of our study. Since we found that groups of people that move in synchrony can make others like them more, think about the countless trends and dance videos circulating social media platforms. People underestimate how much they can be affected from merely watching synchronous movement. This could be dangerous, as most social media use is not monitored properly by parents, meaning that young people could be following and liking

content creators who post harmful and inappropriate videos. There are countless news articles about people being harmed while doing meaningless internet trends. Therefore, caution in using social media could be one of the main implications of our study.

Limitations and Future Directions

Since this study was conducted with mostly participants who were under the age of 30-40. In future studies it would be interesting to see if the effects of liking from social media cues transferred to those who are not familiar with social media or technology in general. Therefore, obtaining a participant pool who are 50-60 and older could yield results showing there is no difference in online liking behavior in the synchrony and asynchrony condition. This could be explained by a review done by Leist (2013) which mentions that older adults seem to have a few limitations when it comes to social media use some of them being: a generally negative perspective on information communications technology (ICT) and “different kinds of perceived barriers, such as intrapersonal (e.g., ‘I am too old for it’)” (Leist, 2013, p. 379). The negative views could possibly mean that they generally do not like social media let alone giving videos a “like”.

Another point that came to our attention was that future studies could include a various array of dance performance categories, not only hip hop. The participants would do the same questionnaire; however, each participant would be divided into 3 more subgroups that would each see a different dance category. Whether it be ballroom dancing, break dancing, ballet the options are endless. It would be interesting to see if the type of dance could somehow influence how much people like the group.

Another direction for future research could be altering the variables that were being manipulated (i.e., synchrony versus asynchrony). According to our manipulation checks some people did not perceive synchrony when they were in the synchrony condition. Which is not the response we were hoping for. Therefore, perhaps adjusting the manipulation check to see

if participants perceive solidarity or coordination could result in less participants being excluded from the study. In addition, the asynchrony condition could have been more disordered as again, people still perceived some synchrony in the asynchrony condition. If the changes were to be made maybe the results could have been significant for the online liking behavior.

The fact that the study was conducted in an online setting can also be a point to raise. Questionnaires were distributed to individuals via social media platforms and SONA, which means that participants environment was not controlled while doing the questionnaire. During the testing phase of our questionnaire there were some individuals who did not do the survey as intended as they were doing it at home. An individual that I know was also incredibly distracted from the survey because of the environment they were in. This could be the reason why people did not fill in the questionnaire to the best of their abilities because of potential distractions in an uncontrolled environment. If people were sat in a lab that had external environments controlled for, participants would be more focused to the task at hand. Therefore, their responses could not be affected by for example, watching television and seeing something they like, thus answering “strongly agree” to questions such as “I like the group” because they do not realize they are being influenced by the external source as well.

With this being said conducting the study with a live performance could be a lot more immersive and therefore perhaps lead to new findings. There were participants in the study who did not watch the video how we wanted them to watch it (i.e., they watched it without sound and did not finish the whole video), this might have affected their answers in the survey. By providing a live performance it would eliminate differences in how the stimuli (dance performance) is received by the participants. Everybody will be watching the performance at the same time, with the same volume and duration. It would be interesting to see if this way of presenting the stimuli could cause the participants to like the group even more or not.

Conclusion

The findings of our research are in line with the hypothesis that people who observe synchrony like the group members more than if the group members were moving asynchronously. This is also applied to online liking behavior where people were more willing to give the video a “like” in the synchrony condition compared to the asynchrony condition. Many implications were discussed and one of the most important one was that people should take caution when browsing social media, as they are affected by the content more than they think they are. Future direction of this research can include adjusting the stimuli used so that there is more disorder in the asynchrony condition and investigating variables such as age and dance categories as a moderator. This research was done in hopes of finding results that can be useful to society in some way or another and I believe it has done so indeed.

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This survey was generated using Qualtrics software, Version January, 2022 of Qualtrics.

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Appendix A

Greeting

Welcome to our study! Before we introduce you to the topic, you will read some general information about participation. Please read it carefully and ask all questions you might have.

Information form

INFORMATION ABOUT THE RESEARCH Feel Like Dancing

Why do I receive this information?

You have been invited because we are interested to research how people respond to observing dance. You have been invited through social media via the researchers' personal networks and/or because you are a student at the University of Groningen.

This research is conducted as part of the bachelor thesis by M.N. Genova (student), H.N. Gaul (student), O.M. Rofifah (student), T. Simkins (student), E. Tsvetanova (student), and A. van Mourik Broekman (principal investigator, a.van.mourik.broekman@rug.nl).

Do I have to participate in this research?

Participation in the research is voluntary. However, your consent is needed. Therefore, please read this information carefully. Ask all the questions you might have (to a.van.mourik.broekman@rug.nl), for example if you do not understand something. Only afterwards you decide if you want to participate.

If you decide not to participate, you do not need to explain why, and there will be no negative consequences for you. You have the right to withdraw your participation at all times, including after you have consented to participate in the research.

Why this research?

In this research we are interested in how you feel after watching a short dance performance.

What do we ask of you during the research?

Before the research starts, we will ask for your consent to participate.

Then we will ask you some questions about you and your personality by asking you to indicate to what extent you agree or disagree with certain statements. Following this, you will watch a short clip of a dance performance. Finally, we will ask you some questions about what you thought about the performance and how you feel by asking you to indicate to what extent you agree or disagree with certain statements.

This research will take approximately 10-15 minutes to finish.

What are the consequences of participation?

Your participation is entirely voluntary; therefore, no compensation is provided. Your participation is highly appreciated and will help us understand what the social impact is of watching performing art and physical movement.

The dance performance shown in this research does not contain nudity or offensive gestures. However, some of the movements may be considered somewhat explicit. Although we do not expect that this will have negative consequences for most participants, we advise you not to participate if you are sensitive to and/or could be offended by such content.

You may also terminate your participation at any time during the research without any

consequences.

How will we treat your data?

You will be asked to provide personal data such as age, gender and nationality. The data collected in this research will be used for educational purposes (i.e., a bachelor thesis).

Data will be collected anonymously and will not be traced back to you as an individual. The personal data collected will be age, gender, and nationality. Data on age and nationality will be stored separately from the other data after data collection is completed.

Data will be handled (collected, prepared, analyzed) by the aforementioned researchers. All data will be stored for 10 years. Because data is collected anonymously, we cannot access, rectify or erase individual data after participation.

What else do you need to know?

You may always ask questions about the research: now, during the research, and after the end of the research. You can do so by emailing the principal investigator (a.van.mourik.broekman@rug.nl).

Do you have questions/concerns about your rights as a research participant or about the conduct of the research? You may also contact the Ethics Committee of the Faculty of Behavioural and Social Sciences of the University of Groningen: ec-bss@rug.nl.

Do you have questions or concerns regarding the handling of your personal data? You may also contact the University of Groningen Data Protection Officer: privacy@rug.nl.

As a research participant, you have the right to a copy of this research information.

informed consent

INFORMED CONSENT

Feel Like Dancing

- I have read the information about the research. I have had enough opportunity to ask questions about it.
- I understand what the research is about, what is being asked of me, which consequences participation can have, how my data will be handled, and what my rights as a participant are.
- I understand that participation in the research is voluntary. I myself choose to participate. I can stop participating at any moment. If I stop, I do not need to explain why. Stopping will have no negative consequences for me.

Consent to participate in the research:

Yes, I read the research information and consent to participate; this consent is valid until 01-06-2022

If you do not consent or want to withdraw you can quit the questionnaire now without any consequences.

Welcoming Text

Welcome and thank you for taking part in our study!

We would like to ask you to first answer a few questions or to evaluate a few statements, so we can get to know you. Then, you will see a video of a dance performance and you will be asked to answer questions about what you have seen.

It is very important that you read the questions thoroughly, to ensure that you understand what is asked of you. However, there is no right or wrong answer. Please answer as

enthusiastic.

I see myself as critical, quarrelsome.

I see myself as dependable, self-disciplined.

I see myself as anxious, easily upset.

I see myself as open to new experiences, complex.

	Strongly disagree	Moderately disagree	Disagree a little	Neither agree nor disagree	Agree a little	Moderately agree	Strongly agree
I see myself as reserved, quiet.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I see myself as sympathetic, warm.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I see myself as disorganized, careless.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I see myself as calm, emotionally stable.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I see myself as conventional, uncreative.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

I/C

In the next paragraph you will read several statements about how people relate to each other. Each question will include two opposite statements. Please read the statements

carefully and indicate which statement you agree more with, and how strongly you agree with it. A higher negative number means you agree more strongly with the statement on the left side, a higher positive number means you agree more strongly with the statement on the right side.

If you are answering this questionnaire on the phone, you might have to put it in landscape/horizontal screen mode to see all of the text.

	-3	-2	-1	0	+1	+2	+3	
People are defined based on the attributes of the individual.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	People are defined based on the attributes of engaged social groups.
People are independent of social groups.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	People are defined by social groups.
Individuals and groups can be separated.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Individuals and groups cannot be separated.
Individual goals are more important.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Group goals are more important.
Individual's behaviors should follow individual goals.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Individual's behaviors should follow group goals.
To achieve group goals, individual interests cannot be sacrificed.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	To achieve group goals, individual interests can be sacrificed.
For group members, individual rights are more important.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	For group members, individual responsibilities are more important.
At work or at play, it is important to win.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	At work or at play, it is important to harmonize.
The source of group success is competition.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	The source of group success is cooperation.
Groups are better with competition.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Groups are better with harmony.
People should follow free-will.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	People should follow group norms and practices.
When you disagree with others, follow your opinion.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	When you disagree with others, follow group decisions.

Within groups,
individuality is respected.



Within groups, group
uniformity is respected.

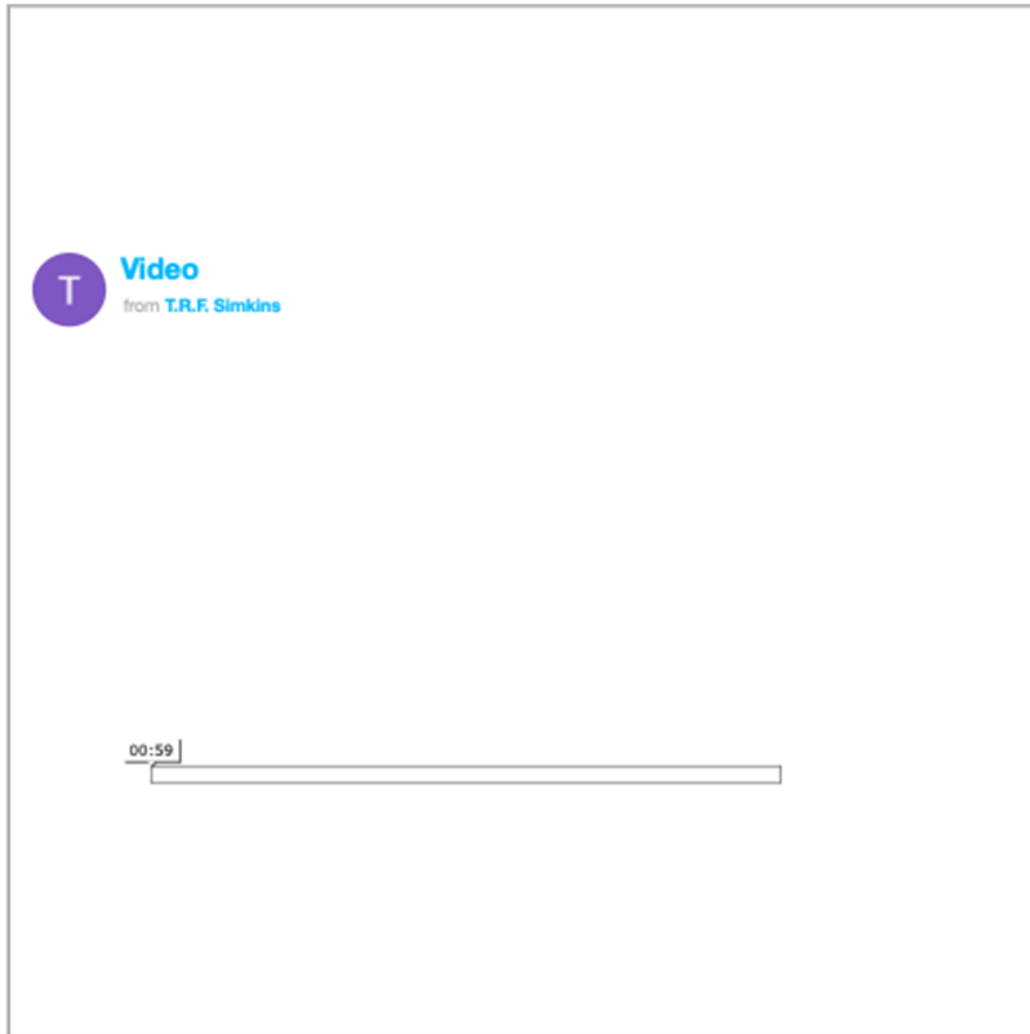
Video sync

Please watch the following video. You do not have to pay attention to anything in particular, just sit back and enjoy.

If you are on the phone, please make sure to use landscape/horizontal screen mode to see the whole video.

The audio of the video is turned high, so if you are wearing headphones, make sure to turn the audio down a little.

Please make sure your audio is on and please only watch the video once, afterwards press the red button below the video to proceed with the survey.



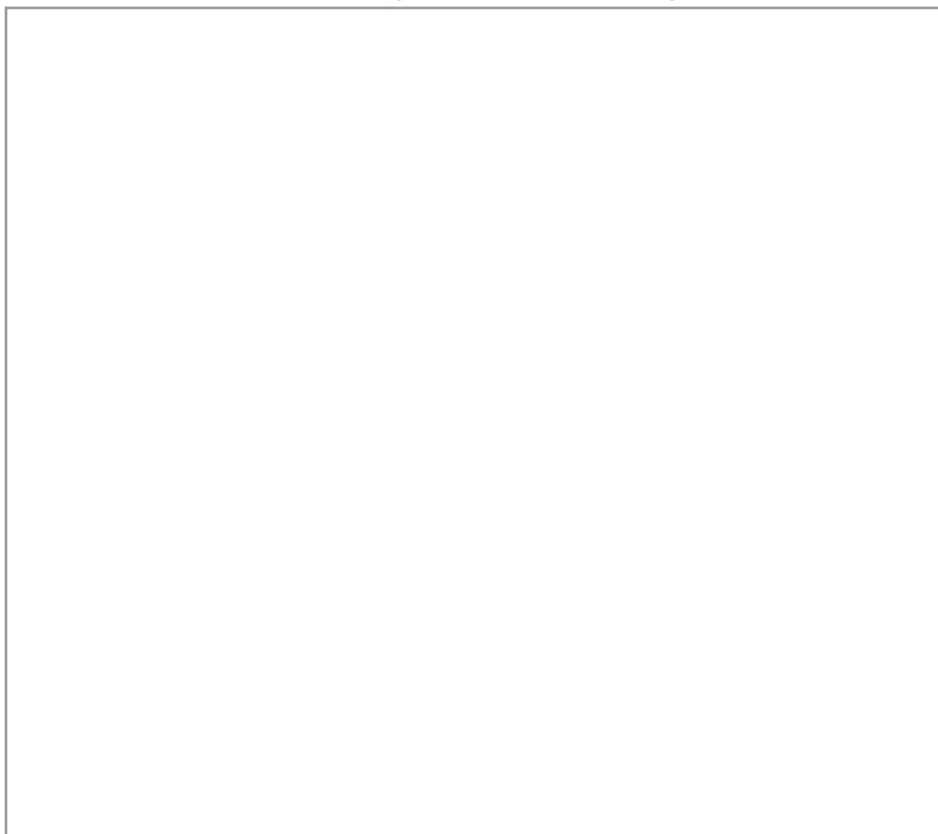
Video async

Please watch the following video. You do not have to pay attention to anything in particular, just sit back and enjoy.

If you are on the phone, please make sure to use landscape/horizontal screen mode to see the whole video. The audio of the video is turned high, so if you are wearing

headphones, make sure to turn the audio down a little.

Please make sure your audio is on and please only watch the video once, afterwards press the red button below the video to proceed with the survey.



Affect

Indicate to what extent you feel the following:

	Not at all	A little	Moderately	Quite a bit	Extremely
Interested	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Distressed	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Excited	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Upset	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Strong	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Guilty	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Scared	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Hostile	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Enthusiastic	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Proud	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Irritable	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Alert	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ashamed	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Inspired	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Nervous	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Determined	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Attentive	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Jittery	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Active	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Afraid	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Belonging

The following statements are concerned with the dance crew you just saw in the video.
How strongly do you agree or disagree with the following statements?

Strongly disagree	Disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Agree	Strongly agree
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When watching

I would immediately help one of the dancers if they are in need.

I feel happy when I see the dance crew enjoying themselves.

I would easily lend money to one of the dancers if they ask me to.

For this particular statement please select the answer "Strongly disagree".

I would share something personal with the dance crew.

I would spend time with one of the dancers if he/she feels lonely.

If one of the dancers is in need, I would take care of him/her.

Liking

The following statements are concerned with the dance crew you just saw in the video. How strongly do you agree or disagree with the following statements?

Neither

media I would give it a "like".	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
If I see the video on social media I would re-post it.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
If I see the video on social media I would leave a positive comment.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
If I see the video on social media I would share it with friends.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
If I see the video on social media I would bookmark/save it.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

offense

Following you will find a few questions concerning your attitude towards the video. For every statement give an indication of how strongly you agree or disagree.

	Strongly disagree	Disagree	Slightly disagree	Neutral	Slightly agree	Agree	Strongly agree
I felt offended by the video.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I felt disturbed by the video.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I found the video inappropriate.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Manipulation check

Did you answer the questions genuinely? If you did not, or you see any other reason why we shouldn't be using your data, please select 'Do not use my data'. There will be no consequences for that, it just helps us with the validity of our data.

- You can use my data
 Do not use my data

Further Questions

Do you have any further comments?

Debriefing

Thank you for participating in our research.

In this research we were interested to investigate the social impact of observing a dance performance (how connected you feel with the dancers, whether you like them, and whether you support them). What you did not know is that, you either saw the dancers move in synchrony or not. We want to find out whether people respond differently depending on how the dancers coordinate their movement. Furthermore, we will investigate whether this is affected by your personality as well as whether you are more or less individualistic versus collectivistic.

Please do not talk about the true purpose of the study to people who are still going to participate.

If you have any questions about this research, please contact the principal investigator (a.van.mourik.broekman@rug.nl).

Credit

As researchers we would also like to say a big thank you to the Wrong Generation Crew for performing for the videos you watched earlier.

The Wrong Generation Crew is a dance crew from Sofia, Bulgaria. If you would like to check them out or support them, you can visit their Instagram channel

@wronggenerationofficial; or copy this link:

<https://www.instagram.com/wronggenerationofficial/>

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