Reading Between the "Lives": A Living Library Impact Study on Measuring Spreading Gained Insights and Attitudes

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Abstract

Prejudices are harmful sources of attitudes which can make the lives of marginalized groups such as LGBTQ individuals, refugees, or people of different ethical identities' daily lives really difficult. Therefore, more research should focus on effective ways of combatting prejudices. One theory with this aim is intergroup contact theory, which is based initiating contact between members of different groups to improve negative attitudes. The current study investigated Living Library, an intergroup contact intervention based on participants as "Readers" having contact with members of different social groups ("Books"), and its impact on outgroup attitudes and behavioral intentions. A between-subjects study was conducted with 2 groups: pre-conversation and post-conversation. Both groups received a follow up survey 9 days later, to also investigate sustained effects. The results showed that the intervention was successful in improving outgroup attitudes and that these effects were mediated by intergroup anxiety. However, intention of spreading gained insights from the conversation did not lead to behavior. Furthermore, although the changes in attitudes were in the expected direction over time, this effect was not significant. Future research can benefit from using a larger time frame to collect more data and further investigation into sustained effects in different samples.

Keywords: prejudices, outgroup attitudes, intergroup anxiety, empathy, perspective taking, knowledge, Intergroup Contact Theory, Living Library

Discrimination has been ever-present in society hundreds of years. Although humanity strives to improve, there are a lot of challenges to overcome. To achieve this, we need to first start challenging our own attitudes, therefore prejudices. Allport (1954) describes prejudice as one's positive or negative feelings toward a concept, thing, or person based on personal experiences. Prejudices can be formed based on factors such as a person's sex, sexual or gender identity, religion, ethnicity, race, attractiveness, or even which sports fan they are (Douglas, 2015). Prejudice is known to be a major cause of discrimination and for conflicts in intergroup relations (Brown & Hewstone, 2005), which can have a significant negative impact on minority or marginalized groups.

For instance, individuals who identify as LGBTIQ+ often experience various forms of bullying, harassment, and victimization compared to those who do not identify as members of this group (Institute of Medicine, 2011). Such mistreatment could have dire consequences for their physical and mental well-being such as depression, suicidal thoughts, and anxiety. (Rosenstreich et al., 2011). Members of many different marginalized social groups face similar consequences, such as Syrian refugees in the Netherlands (Fadhlia et al., 2022). These examples highlight the urgent need to combat these biases and improve the lives of discriminated groups, which can be achieved through improving attitudes (Jackson, 2011). The current study also aims investigates theories and interventions with such a goal in mind.

One promising way of challenging one's own prejudices is based on Allport's (1954) Intergroup Contact Theory. The theory suggests that the contact between two social groups can have positive impact, especially when four key conditions are met: equal status between groups, common goals, cooperation, and presence of authority. Numerous intervention studies using this theory have confirmed its positive effects on prejudice reduction in diverse contexts (for meta-analyses see Paluck et al., 2019; Pettigrew & Tropp, 2006). Large meta-analyses also concluded that the four conditions set by Allport is not necessary to achieve a positive contact effect, making the application of the theory less limited (Pettigrew & Tropp, 2006). Although many theories to reduce prejudices exist, intergroup contact has proven itself as the most prominent one (Paluck & Green, 2009). Many examples in literature support this fact.

Different kinds of contact have also proven to be useful, such as racial friendships or nostalgia related intergroup contact towards overweight people (Meyers et al., 2022; Turner & Stathi, 2023). More recent findings also started investigating the effect of online contact and have found promising results regarding prejudice reduction, increased knowledge, and improved attitudes (Schumann & Moore, 2022). Furthermore, imagined intergroup contacts

can also prove to be just as effective and can even foster empathy (Vezzali et al., 2014). Thus, we can conclude that intergroup contact interventions seem to be applicable in many ways, among different populations.

There is more to consider when trying to achieve a positive contact effect. For contact effects to be impactful, the contact experience must be positive (Brown & Hewstone, 2005). Outgroup attitudes in turn have a higher chance of showing improvement if the impact is perceived as positive (Paolini et al., 2014). Research into effective intergroup contact theories also investigate concepts which act as mediators to get a better understanding (Healy et al., 2017). Another meta-analysis by Pettigrew & Tropp (2008) identifies 3 main moderators for a positive contact effect: knowledge, intergroup anxiety, empathy & perspective taking.

Negative expectations based on harmful stereotypes can lead to intergroup anxiety, where individuals feel uneasy about interacting with outgroup members (Stephan, 2014). Previous research has shown that intergroup contact interventions can decrease intergroup anxiety and that it can be a mediator effect for prejudices (Telaku, 2021; Zagefka et al., 2017). This mediation effect was also present together with negative attitudes and decreased behavioral intentions (Hutchison & Rosenthal, 2011). Intergroup anxiety proves to be a strong mediator for several concepts related to intergroup contact.

Knowledge about a group has also been identified as one of the three moderators for contact effect, although what is referred to by knowledge and how to measure can be unclear (Pettigrew & Tropp, 2008). Although intergroup contact can lead to other positive impacts, such as fewer negative emotions (Brown & Hewstone, 2005) or decreased intergroup anxiety, the direct influence of knowledge can be controversial as it is hard to define and therefore hard to measure (Jarott & Salva, 2016). Therefore, more studies should investigate measuring knowledge in different contexts.

Empathy has been used to resolve other intergroup conflicts and was found to have strong effects among different ethnic, national, religious and political groups (Hasson et al., 2022). It has also been found that empathy, together with quality contact increases the intention to help outgroup members (Johnston & Glasford, 2017), suggesting its effects can be strengthened by other mediators. Empathy and perspective taking strategies have also been found to decrease stigma, for instance towards over-weight individuals (Gloor & Puhl, 2016). Perspective taking exercises were also found to increase inclusionary behavior (Adida et al., 2018). Similar effects were observed during an intergenerational contact intervention (Long et al., 2022).

However, past research also points some uncertainties regarding the four conditions set by Allport, and their complex interactions. Paluck et al. (2019) argues that intergroup contact is not yet ready to be included in policy making. One factor which requires further investigation is that the effects of contact interventions were only applicable and generalizable to the immediate context where the contact happens (Pettigrew & Tropp, 2006). Therefore, whether the intervention is still effective after contact, especially over time, is not clearly known. It is also worth noting that few intergroup contact interventions include adults over 25, especially concerning ethnic and racial groups, limiting generalizability over more prejudiced age groups towards these categories (Paluck et al., 2019). To conclude, while many interventions aim to combat prejudices using intergroup contact theory, effective direct intergroup contact interventions remain rare, and more field experimental research evidence measuring multiple influences is needed (Dovidio et al., 2011; Paluck & Green, 2009).

Intergroup contact can also be used to improve other concepts, such as social distance, which refers to the willingness people feel to engage with outgroup members in multiple levels (Bogardus, 1933). Instances of intergroup contact intervention's effectiveness on social distance in different countries have been proven among different ethnic and political groups (Bilali et el., 2018; Ives et al., 2016). Regardless, there isn't much research measuring social distance together with other likely moderators of intergroup contact.

Lastly, little research has measured behavioral intentions after intergroup contact interventions, making it an important area of investigation. Theory of Planned Behavior suggests that behavior is strongly determined by one's intention to perform the behavior (Ajzen, 1991). The use of the model has shown positive implications in biased behavior (Heeren et al., 2023; Ang et al., 2015). Some examples of behavioral intentions in intergroup contact research include the influence of negative attitudes and intergroup anxiety on decreased behavioral intention (Hutchison & Rosenthal, 2011), or improve of behavioral intentions through imagined contact (Vezzali et al., 2012) Research into improving prejudicial attitudes highlights that the transition from attitudes to taking action is critical (Jackson, 2011).

Based on these findings, the current research aims to investigate whether intergroup contact intervention can decrease prejudice towards mixed groups and if these effects persist (1) and whether intention to spread gained insights from the contact experience can lead to the congruent behaviors (2). A model explaining the different relationships between the variables were included in the appendices (Appendix A).

The Current Study

One proven intergroup contact intervention, Living Library, also known as Human Library in other countries, is an initiative that organizes events in different cities, where visitors can interact with people from different social minority or other marginalized groups. The event aims to engage people from different groups in a conversation so that they can address their prejudices. In this format, individuals from minority groups are represented as "books," and visitors "lend" these books for a twenty to thirty-minute conversation during which they can ask any questions the other person is comfortable answering. Living Library has been subject to numerous impact studies in various countries, such as UK, the US, Hungary, Poland, Hong Kong and Turkey involving diverse groups and components (Lam et al., 2023). Most of these studies measure changes in attitudes, as well as important mediators and moderators that are important for a successful intergroup intervention (Pettigrew & Tropp, 2008).

One study investigating several Living Library events in Turkey has found promising results on behavioral intentions of speaking to an outgroup member, increased positive attitudes and increased empathy (Bagci & Blazhenkova, 2020). Living Library is also an active event in the Netherlands and has been subject to impact research, which found promising results on the event's effectiveness on prejudice reduction (Handke, 2017; Jambor, 2015). Studies on Living Library as an intervention for prejudice against minority groups have proven that conversations had during Living Library can decrease social distance towards certain minorities, such as Muslims and Roma population (Orosz et al., 2016; Groyecka et al., 2017). However, these results are not always consistent or can differ in generalizability (Lam et al., 2023). Additionally, some findings include the same restraints previous meta-analyses have mentioned, such as being limited to certain groups or being or being applicable only to immediate context (Paluck & Green., 2009; Pettigrew & Tropp, 2006).

Living Library does not fulfill all four conditions for a successful intergroup contact suggested by Allport; there is an equal status between groups, a collaboration of sharing information and community support, but no concrete goals to be achieved. Regardless, Living Library is a promising intervention of positive impact. Therefore, it is intriguing to study the factors that influence its effectiveness. The current research aims to investigate the impact of different Living Library events across the Netherlands on different attitudes towards the outgroup and on the behavioral intention to spread gained insights. Additionally, we are

interested in whether these effects persist over a longer time. To measure the effectiveness of the Living Library events, several variables will be examined. By examining the relationships between attitudes, social distance, empathy, perspective taking, knowledge, intergroup anxiety, and behavioral intentions to spread insights, this study aims to shed light on the mechanisms underlying the spread of knowledge and awareness about marginalized groups through Living Library events. Based on past research the current study predicts:

- 1. Having a conversation with an outgroup member will lead to more positive attitudes towards the social group for people who had the conversation, compared to the people who haven't had the conversation.
- 2. This effect will be mediated be social distance, intergroup anxiety, empathy, perspective taking and the amount of knowledge about a social group.
- 3. The behavioral intention of spreading gained insights will lead to the behavior.
- 4. There will be in increase in positive outgroup attitudes in the follow up for the participants who filled in a survey before the conversation, compared to those who filled it after the conversation.

Method

Participants & Design

With 2 conditions, the present study consisted of N=78 participants (65.4% female, 28.2% male, 6.4% other), all above 18 and ranging between 19 and 80 (2 missing, M=44.86, SD=18.68). Responses for the survey before the conversation (pre-condition) included 30 participants, whereas the responses for the survey after the conversation (post-condition) included 48 participants. 80.8% of the participants filled in the survey in Dutch (N=63) and 19.2% filled it in in English (N=15). Other demographic information such as ethnicity (American, Dutch, German, Brazilian, Ukranian Dutch-Indonesian, etc.), sexual orientation (61 Heterosexual, 3 Homosexual, 8 Bisexual/Pansexual, 5 'Prefer not to say', 1 'Other'), neurodivergence (Yes 22, No 53, 'Don't want to disclose' 3) and disabilities (11 'Yes', 61 'No', 6 'Don't want to disclose') were also included. Out of 102 participants who completed the survey, 23 were excluded from the final dataset due to not completing the survey or having invalid responses One person was excluded due to being under 18 years old. Furthermore, out of the 78 participants only 33 people responded to the follow up survey which was sent 9 days later. 4 of these were included due to having incomplete surveys, ending up with 29 responses for the follow up survey.

The design of the current study was 2x2 quasi-experimental between-subjects, including two groups where one group a received survey before and one group received a survey after the intervention. Both groups received a third follow-up survey 9 days after the respective Living Library event. The data collection occurred during the Living Library events in Zwolle, Leeuwarden, Gennep and Den Haag. The surveys were adjusted according to the list of books at each event. In total, it took participants 5-10 minutes per questionnaire.

Due to time constraints because of the limited available events, a sensitivity power analysis with 80% power and a = 0.05 was conducted in G*Power (Faul, 2007) to estimate the effect sizes for each hypothesis. For the first hypothesis (N = 78), the effect size was determined as $|\rho| = .32$, wheras for the second hypothesis this was $|\rho| = .10$. For the third and fourth hypothesis (N = 29), this was $|\rho| = .27$ and $|\rho| = .47$ respectively.

The current research project was reviewed and approved independently by the Ethics Committee Social Sciences (ECSS) of Radboud University (reference code: 23N.003294).

Measures

Qualtrics was used to create pre, post and follow-up questionnaires for this study (Appendix B). As the study was conducted in four different cities, each survey was adjusted to represent the books available at the event. Participants could fill in the survey in English or Dutch and started by reading the study's information letter and filling in the consent form. Upon completion, they answered the demographic questions regarding age, gender, sexuality, ethnicity, neurodivergence and disabilities. The ID was also used to match the pre and post survey responses to the follow up survey. The 3 surveys also included questions for Living Library's interest which were not included in the main analyses. Different social psychological components were measured in this study. Participants were asked to answer the questions with the social group which the book they have read or were about to read belonged to, in mind. The measures are listed in detail below. The 3 surveys also included questions for Living Library's interest (e.g., "How did you hear about Living Library?"), which were not included in the analyses.

Demographics. Age, gender, sexuality, ethnicity, neurodivergence and disabilities were measured. Age ("What is your age?") and ethnicity ("What is your ethnicity? (For example, Dutch / Turkish-Dutch / Chinese)") were measured with a fill-in text box as an answer option. Gender (What is your gender?) included multiple choice options. Neurodivergence ("Do you classify yourself as neurodiverse?") was also measured with multiple choice options. The meaning of neurodivergence was also defined in the question.

Sexuality ("What is your sexual orientation?") question also included multiple choice answers. Finally, disabilities ("Do you have any disabilities?") was also measured also with a multiple-choice question.

Outgroup Attitudes. Stereotype Content Model (Fiske et al., 2002) explains different attitudes related to the types of stereotypes formed through interpersonal or intergroup interactions. The model defines two primary dimensions: warmth and competence. These dimensions reflect the belief that people evaluate others based on their intentions and whether they are positive or negative. While this refers to the warmth dimension, the capability to carry out these goals is defined as competence (Fiske et al., 2002). These dimensions also create mixed stereotype content, which are envious (high competence, low warmth) and paternalistic (low competence, high warmth) stereotypes.

We measured attitudes using a scale with 4 items. There was one item each for the dimension: Warmth ("How warm do you feel towards the social group?"), Competence ("How competent do you think the social group is?"), Trust ("How trustworthy do you think the social group is?") and Friendliness ("How friendly do you think the social group is?"). These items were measured on a scale with a slider which included numbers from 0 to 100. Overall, the scale was found to have high reliability (Cronbach's $\alpha \ge .86$). The mean scores for Attitudes were calculated for the pre and post surveys. For the follow up surveys, the mean score was calculated separately.

Empathy. To measure empathy with the social category which the book belonged two, two items were used, one of which was reverse coded (e.g., "The misfortune of this social group doesn't usually disturb me a great deal.") (Batson et al., 1997). Respondents were asked to what extent they agree on a 5-point Likert scale (1 = "Strongly disagree" – 5 = "Strongly agree"). These items were significantly correlated and the correlation was high (r(76) = .36., p = <.001).

Perspective taking. Perspective taking was measured with the same Likert scale and included two items, one of which was reverse coded (e.g., "I try to understand this social group better by imagining how things look from their perspective.") which was reverse coded (Davis, 1980). However, these two items were not significantly correlated, (r(76) = .118., p = .302). Therefore, these items were included in the analyses separately.

Intergroup anxiety. Items for intergroup anxiety included two items, one of which was reverse coded (e.g, I would feel relaxed when interacting with a member of the social group.")(Harwood et al., 2005). These two items were negatively correlated and the

correlation was relatively high (r(76) = .263., p = .020). Mean of the two items were calculated for empathy and intergroup anxiety to be used in the analyses.

Social Distance. This was measured using a scale with 4 items and was adjusted based on Bogardus Social Distance Scale (1933), which was also used on recent studies (Groyecka et al., 2019; Orosz et al., 2016). Each item included a statement (e.g., "I would be willing to accept members of this social group as a neighbor on the same street.") and participants were asked to rate the statements based on how much they agree with it on a 5-point Likert scale (1 = "Strongly disagree" – 5 = "Strongly agree"). The scale overall showed really high reliability (Cronbach's $\alpha \ge .91$). The mean scores for the scale were calculated for pre/post survey and the follow up survey separately.

Knowledge. Knowledge was measured with a single item which was also used as one of the two items in a previous study (Handke, 2017). The participants were asked how much they knew about the social group of the book they were about to read ("In general, how much do you know about this social group?") and this was measured with a 5-point Likert scale (1 = "None at all" -5 = "A great deal). This measure was included in all 3 surveys.

Quality of the conversation. Only the post and follow up surveys included a measure about the quality conversation as these surveys were provided after the conversation. This question was a single item and was solely based on how much the person enjoyed the conversation they had with the book ("To what extent did you enjoy the conversation you just had with the book?"). This was also measured with a 5-point Likert scale (1 = "None at all" – 5 = "A great deal").

Behavioral Intention & Behavior. In the context of the current study, the behavioral intention is to spread the insights gained from the conversation to others in their social network. This was picked as the target behavior because it was decided as the most plausible social contact within a week after the event. This was also measured with a 5-point Likert Scale ("How likely you are to share the insights you have gained today with others?") (1 = "Very little" – 5 = "Very likely"). A measure for the actual behavior was included in the follow up survey with an answer option of "Yes" or "No". If the answer was "Yes", an additional question was asked about how often they have spread these insights as an openended question. Finally, it was asked whether they did anything else with the insights they have gained from the conversation as an open-ended question.

Procedure

The field study was conducted during four different Living Library events around Netherlands. The events occurred on 29th April in Zwolle, on 5th May in Leeuwarden, on 4th June in Gennep and on 10th June in Den Haag. The participants were randomly assigned to the condition either at the registration (pre-condition), or at the evaluation desk for the event post-condition) At the registration desk people were only asked to participate after they registered for a "book" to read. The book titles included representatives from marginalized groups and other groups one does not easily come across, such as "Transgender, Abused as a child, Sex worker, Refugee, Riot police, Acquired brain injury, Bipolar, FASD (Fetal Alcohol Syndrome Disorder)" etcetera (Appendix C).

The participants were briefly informed about the study at both time points and were also informed that participation was entirely voluntary. If they agreed, they were assigned a participant number which they were asked to fill in in the beginning of the survey. They were also informed that they would also receive another survey in 9 days. For this reason, the emails were collected separately as not to be able to relate it to participant's data. These emails were then sent by Living Library with their matched participant ID, so that we were able to match the pre or post survey data to the follow up. The last digit of the participant ID referred to the condition the participant was assigned to. The list of email addresses was deleted after emails were sent.

Data analysis

Survey data was exported to IBM SPSS 27 for data preparation. Two separate datasets were created to test the different hypotheses. One dataset only included all the participants' responses for the pre and the post survey and the other one also included all of these responses, as well as the responses to the follow up study for those responded among the 78 participants. The mean scores for empathy, intergroup anxiety, social distance and attitudes were calculated.

A Shapiro-Wilk test was conducted and frequency tables for the variables which are included in the analyses were generated. This showed that attitude, intergroup anxiety, quality of the conversation, perspective taking (item 1) social distance means were not normally distributed. However, as previously mentioned, the reliability analyses and the correlations for empathy and intergroup anxiety were significant. Non-parametric tests were used when necessary.

To investigate the first hypothesis, a one-way ANOVA was conducted with attitude mean (0-100) as the dependent variable and condition (Pre/Post) as the dependent variable. To test the second hypothesis, a simple mediation analysis was conducted using the PROCESS macro for SPSS. Here attitude mean (0-100) was used as a dependent variable, condition (Pre/Post) was used as an independent variable and mediation analyses were run separately for: empathy mean (0-5), social distance mean (0-5), intergroup anxiety mean (0-5), perspective taking (item 1) (0-5), perspective taking (item 2) (0-5) and knowledge (0-5). To test the third hypothesis, logistic regression analysis was run between intention (0-5) and quality of the conversation (0-5) as independent variables and behavior (Yes/No) as a categorical dependent variable. Additionally, a point biserial Pearson correlation was run between intention (0-5) and behavior (Yes/No).

Finally, to test the fourth hypothesis, Repeated Measures ANOVA was conducted with time (before/follow-up) as the within-subjects factor, condition (Pre/Post) as the between subjects factor and attitude mean (0-100) as the dependent variable. Additionally, the non-parametric alternative Wilcoxon Signed Ranks Test was conducted to decide the null hypothesis with the following variables: attitude mean scores for the first time point and second time point (follow up) attitude mean scores and condition (Pre/Post).

Results

To test the first hypothesis, a one-way between subjects ANOVA was conducted to compare the effect of the contact intervention on positive outgroup attitudes in pre and post conditions. There was a significant effect of the intervention on attitudes, F(1,76) = 10.836, p = .002, $\eta^2 = 0.13$, indicating a small effect size. Therefore, it was concluded that participants were significantly more positive about the social groups after having the conversation (M = 80.94, SD = 2.39) than before the conversation (M = 68.53, SD = 2.84)². The first null hypothesis was rejected.

To investigate the second hypothesis, a simple mediation analysis was performed using PROCESS with the mean attitude score as dependent variable and condition as predictor. Separate mediation analyses were conducted with social distance, empathy, intergroup anxiety, perspective taking (item 1), perspective taking (item 2) and knowledge (Appendix

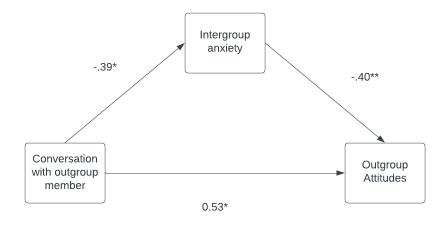
¹ Due to the robustness of one-way ANOVA and the sample size, it was concluded that a non-parametric alternative was not necessary.

² The one-way ANOVA which was conducted without the outlier for attitudes yielded similar results, which is why the results of the initial analysis were included.

C). Only intergroup anxiety showed significant effects (Figure 1). The direct pathway from condition to attitude [b = 9.068, t = 2.550, p = .013 95% C.I. (1.98, 16.15)], the path from condition to intergroup anxiety [b = -0.3938, t = -2.138, p = .036 95% C.I. (-0.76, -0.27)], and from intergroup anxiety to attitude were all significant [b = -8.472, t = -3.940, p = .002, 95% C.I. (-12.76, -4.19)]. The indirect effect of condition on attitude was also significant [b = 3.336, 95% C.I. (0.18, 7.38)]. It was concluded that intergroup anxiety was mediating the relationship between the intervention and changes in attitude means. Thus the null hypothesis was rejected only for intergroup anxiety.

Figure 1

Standardized Regression Coefficients for the Relationship Between Conversation with Outgroup Member and Attitude as Mediated by Intergroup Anxiety



$$*p < .05 **p < .01$$

To test the third hypothesis, a logistic regression analysis was used to analyze the relationship between intention and quality as predictor variables and behavior as the dependent variable. Neither intention nor quality was found to contribute to the model. The unstandardized Beta weight for the Constant; B = [6.421], SE = [4.461], Wald = [2.072], p = .150. The unstandardized Beta weight for the predictor variable quality; B = [-0.476], SE = [0.925], Wald = [0.265], p = .607., and for intention; B = [-1.242], SE = [0.833], Wald = [2.224], p = .136. The estimated odds ratio favored a decrease of nearly 71% percent [OR = 0.258, 95%] C.I. (0.06, 1.48) for behavior every one unit increase of intention, and a decrease of nearly 38% for every one unit increase of quality [OR = 0.621, 95%] C.I. (0.10, 3.80). This suggests

that behavior was less likely occur for higher quality and intention scores. Additionally, a point binomial correlation was run between intention as the independent variable and behavior as the dependent variable. They were found to be negatively correlated; however the correlation was not significant [r(1) = -0.455, p = .077]. Therefore, we can conclude that there was no main effect of intention on behavior.

The planned analysis for the fourth hypothesis yielded significant results. An RM ANOVA was conducted to compare the effect of the intervention on attitude mean score in the follow up measure, with attitudes as dependent variable, time as a within subjects' factor and condition as a between subjects factor. No main effect was found of time on attitudes [F(1,27) = 0.248, p = .622]. Moreover, no evidence was found for a difference between pre and post attitude mean scores [F(1,27) = 1.072, p = .310]. As expected, there was a significant interaction effect of time and condition $[F(1,27) = 9.845, p = .004, \eta^2 = 0.27]$. However, due to the first measure of attitude scores being not normally distributed, the non-parametric alternative Wilcoxon Signed-Ranks Test was conducted. The results indicated the pre/post-test results that pre/post test scores for attitude were not significantly different than the follow-up scores (z = .478, p = .632.). There for it was concluded that although the change in attitudes were in the expected directions for each condition, this change was not significant.

Explorative Analyses

A moderation analysis was conducted with behavior (Yes/No) as the outcome variable, Intention as the predictor variable and quality as the moderator variable. The interaction between intention and quality was not found to be significant [OR = 0.258, 95% C.I. (-4.03, 5.37), p = .78]

To investigate the effects of Condition on other variables, one-way ANOVA was conducted for each variable. There were only significant effects of the condition on intergroup anxiety $[F(1,76) = 4.571, p = .36, \eta^2 = 0.57)]$ and perspective taking (item 2, reverse coded) $[F(1,76) = 8.110, p = .006, \eta^2 = 0.967)]$. The means of intergroup anxiety differed significantly in pre-condition (M = 2.38, SD = 0.78), compared to post condition (M = 2.00, SD = 0.79). The means of the perspective taking item were significantly higher in post-condition (M = 3.52, SD = 0.92), compared to pre-condition (M = 2.90, SD = 0.96).

To test the effect of time on other variables Wilcoxon Signed-Ranks test was conducted with each variable separately. The results indicated that the follow-up score for social distance was significantly lower than pre/post scores (z = -2.317, p = 0.020, $\eta^2 = 0.003$). The

effect size for this test was calculated as described in Fields (2018) by dividing the standardized test statistic Z by the square root of the total number of observations N.

Discussion

The current study's the main objective was to examine the effects of Living Library, an intergroup contact intervention, on individuals' positive outgroup attitudes. Moreover, we explored whether these effects persisted over a longer time and whether the intention to discuss gained insights with others translated into actual behavior. The findings of the study showed an increase in positive outgroup attitudes. This suggests that engaging in a conversation with a member from a marginalized group during the Living Library event had a positive impact on individuals' attitudes. Furthermore, we found that the effect of the conversation on attitudes was mediated by intergroup anxiety, but not knowledge, empathy, perspective taking or social distance. This suggests that having a conversation with member from a marginalized group led to a decrease in anxiety, which resulted in more positive attitudes towards the outgroup.

However, when examining the sustained effects of the conversation on attitudes the study revealed mixed results. The study showed that the mean scores were increased for the pre-condition and decreased for the post-condition. These attitude changes were in the expected direction, however the effect was not significant in the non-parametric test, but was significant in the repeated measures ANOVA, where there was a significant interaction effect of time and the conversation. Therefore, it was concluded that the changes in the mean were not significant. These mixed results do not allow for strong conclusions, due to the attitude means being not normally distributed and the small sample size.

Also unexpectedly, the results showed that intention to spread gained insights from the conversation did not translate into actual behavior. In fact, there was an unexpected inverse correlation between intention and behavior, indicating that higher intentions were associated with lower levels of actual behavior. Thus, the conclusion was that intention did not lead to behavior.

The findings of the current study are in line with previous research on Living Library and attitude changes (Bagci & Blazhenkova, 2020; Handke et al., 2017). Furthermore, our findings are consistent with Pettigrew & Tropp's meta-analysis (2006), suggesting that the four conditions set by Allport (1954) does not need to be all present to achieve a positive contact effect. However, the current findings should be interpreted carefully concerning the small effect size. The findings on intergroup anxiety's mediating effect add to the literature

on the relationship between attitudes and intergroup anxiety (Zagefka et al., 2017; Telaku, 2021) and also confirms findings of Pettigrew & Tropp (2008) suggesting intergroup anxiety as one of the important moderators for contact effect, especially considering that all the variables were measured together.

Furthermore, the additional exploratory findings revealing a significant decrease of intergroup anxiety in the post condition and a significant decrease of social distance in the follow up measures, also add to previous literature of contact interventions showing significant effects on decreased intergroup anxiety (Hutchison & Rosenthal, 2011) as well as Living Library studies on decreased social distance (Groyecka et al.2019; Orosz et al., 2016). Effective findings of social distance usually focus on groups of different ethnicities, or racial findings (Bilali et el., 2018). Although the current study sample included these groups, they were mixed with other categories. Therefore, the effects were not concentrated on a specific group that could have yielded more differences between the two conditions.

The study concluded that the intention of spreading gained insights did not lead to actual behavior and higher intentions were correlated with lesser likelihood for the behavior. This finding is contradicting with the model Theory of Planned Behavior (Ajzen, 1991), and its application in previous research (Heeren et al., 2023; Ang et al., 2015). This could have occurred because the uses of Theory of Planned Behavior usually incorporate more components of the model in the study (Verma & Chandra, 2018). For the current study the only relevant component was the attitudes, which had no significant relation to intention in exploratory analyses.

Moreover, research suggests that intention does not always translate into behavior, referred to as intention-behavior gap (Sheeran, 2016). This can occur due to non-specific goal setting, basing intention on non-personal goals and the practicality of carrying out the intention, which the current study did not control for. Research shows that personal goals together with implementation intentions strengthens the likelihood of behavior (Koestner et al., 2022). Future research can benefit from incorporating personal goals and implementation intentions related to the behavior (also known as if-then goals). This can be achieved by asking participants to come up with a moment to talk about their experience during Living Library.

The current study also did not find any mediating or effects for knowledge, perspective taking and empathy. These findings contradict previous research (Handke, 2017). Measuring the extend to knowledge is a difficult task, as it is hard to define (Jarott & Savla, 2016). Therefore. Findings on empathy are also surprising considering its effect on conflict

resolution (Hasson et al., 2022), as well as Living Library interventions (Bagci & Blazhenkova, 2020). Research suggests empathy can be a limited source, due to group boundaries (Cikara et al., 2011), which suggests that people feel less empathy towards outgroup members. The problem could once again have arisen due to certain groups are associated with less empathy, compared to other groups, such as Asians (Xu et al., 2009). Regarding perspective taking, the items were not significantly correlated, therefore the mean of the two items could not be used for an overall assessment.

Moreover, quality of the conversation was not found to be a moderator for the conversation's effects on attitudes, which was opposite of the suggestions by Brown & Hewstone (2005), regarding a positive contact effect. Previous research has measured quality with several items based on Brown & Hewstone's (2005) research. For the reason of providing convenience to participants by not providing them with a very long survey, only one item was included in the present research. This could have limited a general overview of the concept. Furthermore, quality was only measured in post condition and used to investigate its effect on behavior. Therefore, it had to be analyzed together with follow up data, which had significantly less responses (N = 29).

The current study is not without limitations. Firstly, given the timeframe of the project, data collection was only possible during a handful, selected events. Due to this limitation, the surveys constructed for the study could not be included in a pilot study. Future research could benefit from using initial events as opportunities to pilot their measures to have materials which are more reliable.

Moreover, the time limitations led to a smaller sample size, which influences the generalizability of the current results. Future research on Living Library could try utilizing a larger time frame to make up for the lack of participants during certain events. Additionally, due to the need for collaboration of other volunteers at the event, miscommunications occurred when recruiting participants, which led to significant amount of difference in participants for the pre and post condition. Most participants also seemed to prefer filling in a survey after the conversation rather than before. This could also be prevented in the future by using the initial events as an opportunity for pilot studies.

Another limitation was the limited number of responses to the follow up survey. Out of 78 participants included in the data analysis, only 29 follow responses were able to be included. This also creates a limit to generalizability and leads to insufficient power, which could also explain the non-significant result for the non-parametric test which had to be used instead of the RM ANOVA for the conclusion. This is unfortunately the case for most

research, where people are less likely to respond to a follow-up assessment (Detorri, 2011; Handke; 2017). In the future, more ways to achieve higher response rates could be utilized, such as more reminders. The limited responses could also explain why most variables were not normally distributed. The non-normal distribution of attitude scores and the unexpected correlation between intention and behavior raise questions about the robustness and generalizability of the findings.

Additionally, due to practical reasons and search of an overall effect, the research was conducted over participants' responses to the books in general. Choosing the right target group is an important step of testing the effectiveness of an intervention (Buunk et al., 2021) Although it is interesting to look at attitude changes overall, it could have caused inability to observe some of the measures' impact on attitudes, as previously mentioned. The specific context of Living Library could also be considered a limitation in generalizing these findings to other populations and settings. For future research it would be advisable to measure the same components in different subgroups, especially more specific ones such as social distance which was proven significant for foreign populations in host countries (Orosz et al., 2016).

Future research should aim to replicate and expand upon these findings, addressing the limitations observed in this study. Further investigation into the sustained effects of the intervention, exploring alternative mediators and moderators, and examining the role of other factors such as empathy and perspective-taking separately could provide a more comprehensive understanding of the intervention's effectiveness.

Despite its limitations, the current study has both theoretical and practical implications for Living Library and the underlying mechanisms of contact effect. To my knowledge, the current study is the first of its kind to investigate the effects of contact among such a diverse category of groups without dividing them into subgroups. Additionally, it is the first of its kind with this unique study design of dividing pre and post measures into two groups and providing both with a follow up measure, that is embed in literature. Furthermore, the current study tested people with similar motivations at different time points. This was possible able to overcome the social desirability, which might be able to explain the previous findings (Handke, 2017).

These findings provide valuable insights into the effects of the Living Library intervention on attitudes and behavior. Despite the significant immediate effects on attitudes and the mediating role of intergroup anxiety, it appears that the sustained effects and the translation of intention into behavior may be more complex and require further investigation.

One conclusion to highlight is that the current study demonstrated that people were able to generalize from an individual to the respective social group (Stark, Flache, Veenstra, 2013). This emphasizes the importance of individual contact for group level prejudice reduction or conflict resolution.

Overall, the current study contributes to the existing literature by shedding light on the immediate effects of the Living Library intervention on attitudes and the mediating role of intergroup anxiety. It demonstrates that a short conversation had voluntarily can already improve attitudes towards marginalized groups and influence intergroup anxiety. It also highlights the need for further research to explore the sustained effects and the translation of intention into behavior, ultimately aiming to enhance the efficacy and impact of interventions promoting positive intergroup attitudes and behavior change. Regardless, Living Library is an efficient intergroup contact intervention that is promising to prove useful in various settings and concerning various discriminated groups.

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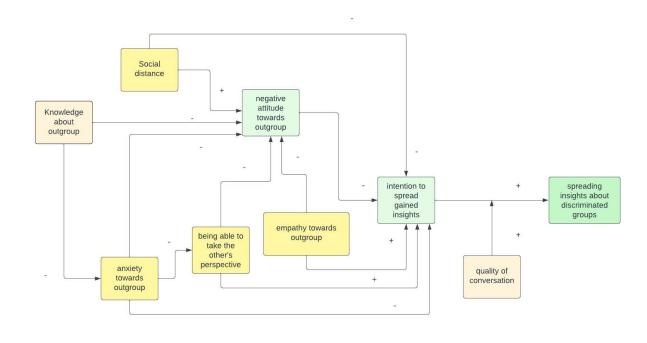
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Appendix A

Process model depicting different variables' influence on each other and the behavior of spreading gained insights



Appendix B

Living Library (pre-test)

Start of Block: Default Question Block

Q1

INFORMATION LETTER

This research is a collaboration between the Living Library and Radboud University's Behavioural Science Institute. In this study, we will ask questions about the conversation(s) you are about to have at the Living Library event. Additionally, we will ask some questions after one week with a survey which we will send via e-mail. Answering these questions will in total take about 10 minutes. Each questionnaire takes 5 minutes.

Data storage

The study has been reviewed independently by the Ethics Committee Social Sciences (ECSS) and there is no formal objection to this study. All data are handled anonymously and confidentially. The information you provide for the current research purposes is treated

with the utmost care and is accessible to the below-mentioned project leaders only. Personal data will be collected and analysed to provide people with an overview of the research sample. Personal data includes gender, age, ethnicity, sexuality and neurodiversity and disability (you can choose not to disclose). The consent form signed by you will be kept for 10 years upon completion of the research. Your anonymized research data will be stored for at least 10 years after the research has been completed. Anonymized data will be shared with other researchers on the Open Science Framework. This means that you can no longer be identified on the basis of these data. If you do not want your anonymized data to be shared, you cannot participate in this research project.

Access to data

Some persons and organizations must have access to your personal and research data. This is necessary to test whether the research has been carried out properly and reliably. These persons and supervisory authorities inspecting your data for verification include: authorized persons within Radboud University (for example a dean, director or data officer) and (inter) national supervisory authorities (for example the Dutch Data Protection Authority and the Netherlands Board on Research Integrity). They are held to inspecting your data on a strictly confidential basis. You will be asked to grant permission for this access. If you refuse to do so, you cannot participate in the study.

GPDR

Radboud University is responsible for compliance with the General Data Protection Regulation (GDPR) when processing your personal data. The researcher ensures that your privacy and the conditions attached to it are safeguarded and he/she adheres to the Dutch code of conduct for scientific integrity and university policy regarding the storage and management of personal and research data when conducting this research. You have the right to withdraw your consent for the processing of your personal data at any time. Your personal data will then be deleted. You can find the Radboud University Privacy Statement at: https://www.ru.nl/english/vaste-onderdelen/privacy-statement-radboud-university/. If you have any questions about your privacy, please contact the Local Privacy Officer Faculty of Social Sciences (enna.lujinovic@ru.nl).

For general questions, please contact the office of the Data Protection Officer of Radboud University via privacy@ru.nl. More information about your rights in the processing of your personal data can be found at https://www.ru.nl/privacy/english/protection-personal-data/data-subjects-rights/ and on the website of the Dutch Data Protection Authority (https://autoriteitpersoonsgegevens.nl/en).

Voluntary participation

Your participation in this study is entirely voluntary. If you decide not to participate, there will be no consequences. If, during the course of the research, you wish to withdraw your consent and terminate your participation, you have every right to do so at all times. Again, there will be no adverse consequences for you.

If you have any questions, comments or concerns about this study, please contact the researcher responsible: Dr. Gijs Bijstra via gijs.bijlstra@ru.nl

Kind regards,

Dr. Gijs Bijstra, Öykü Cantürk, Max Primbs, Afreen Khalid & Tjits van Lent Behavioural Science Institute Radboud University

End of Block: Default Question Block

Start of Block: Block 1

Q2

CONSENT FORM

for participation in the Living Library project

I herewith confirm that:

- I have been satisfactorily informed of the study in writing;
- I have read the written information;
- I have been given the opportunity to ask questions about the study;
- my questions were answered satisfactorily;
- I have been given ample opportunity to think carefully about participating in the study;
- I participate in the study entirely on a voluntary basis.

I understand that:

- I have the right to withdraw my consent at any time without having to state reasons and without fear of adverse consequences by contacting gijs.bijlstra@ru.nl;
- I have the right to have my research data deleted up until 1 month after the research has been completed;
- I have the right to withdraw my consent for the (further) processing of my data;
- my data are processed in accordance with the applicable European privacy regulations;
- my data are processed in accordance with the privacy statement of Radboud University (https://www.ru.nl/english/vaste-onderdelen/privacy-statement-radboud-university/).

I agree that:

- my research data within this research will be obtained for scientific purposes and will be available for verification, reuse and replication for 10 years;
- the signed consent form with my personal data is kept for 10 years;
- supervisory authorities may inspect my research data for the purpose of auditing the research.

I understand that in order to participate in the study, I must answer yes to all of the above points.

Q3 I agree that personal data, such as ethnicity and sexual orientation, will be processed (anonymously).
○ Yes (1)
O No (you will not participate in this study). (2)
Skip To: End of Survey If ConsentData = No (you will not participate in this study).
Q4 I agree to participate in this study.
○ Yes (1)
O No (2)
Skip To: End of Survey If ConsentParticipation = No
End of Block: Block 1
Start of Block: Block 2
Q5 Please fill in your participant number.
Q6 Which book are you reading today?
▼ Acquired brain injury (1) Transgender and religion (16)
End of Block: Block 2
Start of Block: Block 3

Q7 Dear Participant,

Thank you for agreeing to participate. On the following pages you will be presented with several questions. In answering these questions, please think about the social group that belongs to the book you are about to read. So, in case you are about to have a conversation with the person that belongs to the 'autism book', you answer all questions with this book in mind. Your answers will be anonymous. Please read the instructions carefully and answer honestly. You can answer the question based on your first thoughts.

Page Break ———

Q8 First, we are interested in your evaluation of the social group you're about to have a conversation with. We chose a thermometer to represent your evaluations. In this, warmer feelings (higher numbers) correspond to more positive evaluations. Furthermore, if we talk about competence, we refer to how competent you think the social group is in general areas of life, such as at the job markets, schools, etc.

0 10 20 30 40 50 60 70 80 90 100

How warm do you feel towards the social	
group? ()	
How competent do you think the social group	
is? ()	
How trustworthy do you think the social group	
, ,	
is? ()	•
How friendly do you think the social group is? ()	
	_

Page Break

Q11 Now, we would like to present some statements do you. Please state how much you agree or disagree. Please, again keep the social group of the person you're about to have a conversation with in mind while answering.

	Strongly disagree (1)	Disagree (2)	Neither agree or disagree (3)	Agree (4)	Strongly agree (5)
I would feel relaxed when interacting with a member of the social group. (1)	0	0	0	0	0
The misfortune of this social group doesn't usually disturb me a great deal. (2)		0		0	0
Thinking about problems that this social group faces on a regular basis makes me feel sorry for them. (3)		0		0	0
I might be anxious when I am around members of this social group. (4)	0	0	0	0	0
I try to understand this social group better by imagining how things look from their perspective. (5)		0		0	0
Even if I try to imagine this social group's feelings from	0	0	0	0	0

their perspective, it is generally not easy. (6)

Page Break

Q12 Please read the following statements and indicate how much you agree with each statement. Please, again keep the social group of the person you're about to have a conversation with in mind while answering.

Living Library (post-test)

Start of Block: Block 3

01

INFORMATION LETTER

This research is a collaboration between the Living Library and Radboud University's Behavioural Science Institute. In this study, we will ask questions about the conversation(s) you have just had at the Living Library event. Additionally, we will ask some questions after one week, with a survey which we will send via e-mail. Answering these questions will in total take about 10 minutes. Each questionnaire takes 5 minutes.

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GPDR

Radboud University is responsible for compliance with the General Data Protection Regulation (GDPR) when processing your personal data. The researcher ensures that your privacy and the conditions attached to it are safeguarded and he/she adheres to the Dutch code of conduct for scientific integrity and university policy regarding the storage and management of personal and research data when conducting this research. You have the right to withdraw your consent for the processing of your personal data at any time. Your personal data will then be deleted. You can find the Radboud University Privacy Statement at: https://www.ru.nl/english/vaste-onderdelen/privacy-statement-radboud-university/. If you have any questions about your privacy, please contact the Local Privacy Officer Faculty of Social Sciences (enna.lujinovic@ru.nl).

For general questions, please contact the office of the Data Protection Officer of Radboud University via privacy@ru.nl. More information about your rights in the processing of your personal data can be found at https://www.ru.nl/privacy/english/protection-personal-data/data-subjects-rights/ and on the website of the Dutch Data Protection Authority (https://autoriteitpersoonsgegevens.nl/en).

Voluntary participation

Your participation in this study is entirely voluntary. If you decide not to participate, there will be no consequences. If, during the course of the research, you wish to withdraw your consent and terminate your participation, you have every right to do so at all times. Again, there will be no adverse consequences for you.

If you have any questions, comments or concerns about this study, please contact the researcher responsible: Dr. Gijs Bijstra via gijs.bijlstra@ru.nl

Kind regards,

Dr. Gijs Bijstra, Öykü Cantürk, Max Primbs, Afreen Khalid & Tjits van Lent Behavioural Science Institute Radboud University

02

CONSENT FORM

for participation in the Living Library project

I herewith confirm that:

- I have been satisfactorily informed of the study in writing;
- I have read the written information;
- I have been given the opportunity to ask questions about the study;
- my questions were answered satisfactorily;
- I have been given ample opportunity to think carefully about participating in the study;
- I participate in the study entirely on a voluntary basis.

I understand that:

- I have the right to withdraw my consent at any time without having to state reasons and without fear of adverse consequences by contacting gijs.bijlstra@ru.nl;
- I have the right to have my research data deleted up until 1 month after the research has been completed;
- I have the right to withdraw my consent for the (further) processing of my data;
- my data are processed in accordance with the applicable European privacy regulations;
- my data are processed in accordance with the privacy statement of Radboud University (https://www.ru.nl/english/vaste-onderdelen/privacy-statement-radboud-university/).

I agree that:

- my research data within this research will be obtained for scientific purposes and will be available for verification, reuse and replication for 10 years;
- the signed consent form with my personal data is kept for 10 years;
- supervisory authorities may inspect my research data for the purpose of auditing the research.

research.
I understand that in order to participate in the study, I must answer yes to all of the above points.
Q3 I agree that personal data, such as ethnicity and sexual orientation, will be processed (anonymously).
O Yes (1)
O No (you will not participate in this study.) (2)
Skip To: End of Survey If ConsentData = No (you will not participate in this study.)
Q4 I agree to participate in this study.
○ Yes (1)
O No (2)
Skip To: End of Survey If ConsentParticipation = No
Page Break

Q5 Please fill in your participant number.									
						-			
Q6 Which book have you read today?									
▼ Acquired brain injury (1) Transgender and religion (16)									
Page Break									
Q7 Dear Participant,									
Thank you for agreeing to participate. On the following pages you will be presented with several questions. In answering these questions, please think about the social group that belongs to the book you have just read. So, in case you had a conversation with the person that belongs to the 'autism book', you answer all questions with this book in mind. Your answers will be anonymous. Please read the instructions carefully and answer honestly. You can answer the question based on your first thoughts.									
Q8 First, we are interested in your evaluation of the social group you have had a conversation with. We chose a thermometer to represent your evaluations. In this, warmer feelings (higher numbers) correspond to more positive evaluations. Furthermore, if we talk about competence, we refer to how competent you think the social group is in general areas of life, such as at the job markets, schools, etc. 0 10 20 30 40 50 60 70 80 90 100									
How warm do you feel towards the social group? ()				-	_	_	_	=	
How competent do you think the social group is? ()						_	_		
How trustworthy do you think the social group is? ()						_	_		
How friendly do you think the social group is? ()									

Page Break

Q11 Now, we would like to present some statements do you. Please state how much you agree or disagree. Please, again keep the social group of the person you had a conversation with in mind while answering.

	Strongly disagree (1)	Disagree (2)	Neither agree or disagree (3)	Agree (4)	Strongly agree (5)
I would feel relaxed when interacting with a member of the social group. (1)	0	0	0	0	0
The misfortune of this social group doesn't usually disturb me a great deal. (2)		0		0	0
Thinking about problems that this social group faces on a regular basis makes me feel sorry for them. (3)		0		0	0
I might be anxious when I am around members of this social group. (4)	0	0		0	0
I try to understand this social group better by imagining how things look from their perspective. (5)		0		0	0
Even if I try to imagine this social group's feelings from their perspective, it is generally		0		0	0

not easy. (6)					
Page Break —					
	ase, again keep		indicate how mu o of the person yo		
	Strongly disgree (1)	Disagree (2)	Neither agree or disagree (3)	Agree (4)	Strongly agree (5)
I would be willing to accept members of this social group as a neighbour on the same street. (1)	0	0	0	0	0
I would be willing to accept members of this social group as a coworker. (2)	0	0	0	0	0
I would be willing to accept a member of this social group as a close relative by marriage. (3)		0		0	
I would be willing to accept a member of this social group as a close friend. (4)		0		0	0

Page Break ————————————————————————————————————
Q14 In general, how much do you know about the life of this social group?
O None at all (1)
O A little (2)
○ A moderate amount (3)
○ A lot (4)
O A great deal (5)
Q25 To what extent did you enjoy the conversation you had with the book?
O None at all (1)
O A little (2)
○ A moderate amount (3)
○ A lot (4)
○ A great deal (5)
Q26 How likely you are to share the insights you have gained today with others?
O Not at all likely (1)
O Very little (2)
O Somewhat likely (3)
C Likely (4)
O Very likely (5)

Q27 Do you intend to do anything else with the insights you have gained today?
Q28 Do you plan to read another book?
O No (1)
O Yes (2)
End of Block: Block 3
Start of Block: Block 2
Q15 What was your motivation to visit Living Library today?
Q16 How did you hear about Living Library?
Page Break Q17 What is your gender?
Woman (cis-gender) (1)
Man (cis-gender) (2)
O Non-binary (3)
O Prefer not to say (4)
Other: (5)
Q18 What is your age?

Q19 What is your sexual orientation?
O Heterosexual (1)
O Homosexual (2)
O Bisexual/Pansexual (3)
O Prefer not to say (4)
Other: (5)
Q20 What is your ethnicity? (for example, Dutch / Turkish-Dutch / Chinese)

Q21 Do you classify yourself as being neurodiverse?
Neurodiversity refers to variation in the human brain that manifests itself in different mental functions (e.g. Autism, ADHD).
Yes, please describe: (1)
Yes, don't want to specify (2)
O No (3)
O Don't want to disclose (4)

LIVING LIBRARY'S IMPACT ON ATTITUDES AND BEHAVIOR

Q22 Do you have any disabilities?	
Yes, please describe: (1)	
Yes, don't want to specify (2)	
O No (3)	
O Don't want to disclose (4)	
End of Block: Block 2	

	Strongly disagree (1)	Disagree (2)	Neither agree or disagree (3)	Agree (4)	Strongly agree (6)
I would be willing to accept members of this social group as a neighbour on the same street. (1)	0	0	0	0	0
I would be willing to accept members of this social group as a coworker. (2)	0		0	0	0
I would be willing to accept a member of this social group as a close relative by marriage. (3)	0			0	
I would be willing to accept a member of this social group as a close friend. (4)	0	0		0	
Page Break					

Q14 In general, how much do you know about the life of this social group?
O None at all (1)
O A little (2)
O A moderate amount (3)
○ A lot (4)
○ A great deal (5)
Page Break
Q15 What was your motivation to visit Living Library today?
Q16 How did you hear about Living Library?
Page Break
Q17 What is your gender?
O Woman (cis-gender) (1)
O Man (cis-gender) (2)
O Non-binary (3)
O Prefer not to say (4)
Other: (5)
Q18 What is your age?

Q22 Do you have any disabilities?
Yes, please describe: (1)
Yes, don't want to specify (2)
O No (3)
O Don't want to disclose (4)
End of Block: Block 3
Living Library (follow-up) - Zwolle
Start of Block: Block 2
Q5 In order for us to match today's data with last week's data - without using your personal data (email), it is important that you provide us with your participant number.
You can find this in the beginning of the email we have sent you regarding this survey ('Dear Living Library Attendee (#XXXX)'). You should replace the number from the email in the exact same order.
Q6 Which book did you read last week? (Please keep in mind the book you filled in the previous survey about.)
▼ Acquired brain injury (1) Don't remember anymore (17)
End of Block: Block 2
Start of Block: Block 3
Q7 Dear Participant,

Thank you again for agreeing to participate. Your participation in our study is very important to us. Now it has been a week since you have had the conversation with a book. On the

following pages you will again be presented with several questions about your feelings about the social group the book you have read belongs to. Please take a brief moment to think back to last week's conversation. As in last week's questionnaire, your answers will be anonymous. Please read the instructions carefully and answer honestly. Filling in this questionnaire will only take a couple of minutes. You can answer the question based on your first thoughts.

Page Break —

Q8 First, we are interested in your evaluation of the social group you had a conversation with last week. We chose a thermometer to represent your evaluations. In this, warmer feelings (higher numbers) correspond to more positive evaluations. Furthermore, if we talk about competence, we refer to how competent you think the social group is in general areas of life, such as at the job markets, schools, etc.

0 10 20 30 40 50 60 70 80 90 100

How warm do you feel towards the social group? ()	
How competent do you think the social group is? ()	
How trustworthy do you think the social group is? ()	
How friendly do you think the social group is? ()	

Page Break

Q11 Now, we would like to present some statements do you. Please state how much you agree or disagree. Please, again keep the social group of the person you had a conversation with last week in mind while answering.

	Strongly disagree (1)	Disagree (2)	Neither agree or disagree (3)	Agree (4)	Strongly agree (5)
I would feel relaxed when interacting with a member of the social group. (1)	0	0	0	0	0
The misfortune of this social group doesn't usually disturb me a great deal. (2)		0		0	0
Thinking about problems that this social group faces on a regular basis makes me feel sorry for them. (3)	0	0		0	0
I might be anxious when I am around members of this social group. (4)		0		0	0
I try to understand this social group better by imagining how things look from their perspective. (5)		0			0
Even if I try to imagine this social group's feelings from their perspective, it is generally	0	0		0	0

not easy. (6)		

LIVING LIBRARY'S IMPACT ON ATTITUDES AND BEHAVIOR

Page Break

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Q12 Please read the following statements and indicate how much you agree with each statement. Please, again keep the social group of the person you had a conversation with last week in mind while answering.

	Strongly disagree (1)	Disagree (2)	Neither agree or disagree (3)	Agree (4)	Strongly agree (5)
I would be willing to accept members of this social group as a neighbour on the same street. (1)	0	0	0	0	0
I would be willing to accept members of this social group as a coworker. (2)	0	0		0	
I would be willing to accept a member of this social group as a close relative by marriage. (3)	0	0		0	
I would be willing to accept a member of this social group as a close friend.	0	0		0	0
Page Break					

Q14 In general, how much do you know about the life of this social group after last week's conversation?
O None at all (1)
O A little (2)
O A moderate amount (3)
○ A lot (4)
○ A great deal (5)
Q25 To what extent did you enjoy the conversation you had with the book?
O None at all (1)
O A little (2)
O A moderate amount (3)
○ A lot (4)
O A great deal (5)
Page Break
Q26 In the past week, did you share the insights you have gained from the conversation with others?
○ Yes (1)
O No (2)
Skip To: Q15 If In the past week, did you share the insights you have gained from the conversation with others? = No
Q28 How often and what (in a few words) did you share these insights?

Appendix C

Example book list (for Zwolle)

End of Block: Block 3

- Acquired brain injury
- Domestic violence
- Ex-Jehova's witness
- Polyamourous
- Veteran with PTSS
- Hearing impaired
- Autism and assistance dog
- Sensory processing sensitivity
- Abused as a child by narcisstistic mother
- Sex worker
- Psychosis
- Adoption
- Low literate

- Antillean and elderly
- Social welfare / poverty
- Transgender and religion