# Stranger Danger? Removing Barriers to Social Connection through Meaningful Conversation

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Despite our social nature, people often avoid interacting with strangers in public. Even when conversation ensues, it usually remains in the realm of "small talk", although engaging in more meaningful topics may have lasting effects on well-being. This paper explores beliefs about engaging in meaningful conversation with strangers, in addition to comparing these beliefs with actual experience. We find that people choose to avoid social interaction, and when forced to interact, overwhelmingly prefer to discuss shallow topics rather than deeper material. In contrast to these beliefs, our studies reveal value in having deep conversation with strangers, particularly in instilling meaningfulness and feelings of social connection. We then devise an exploratory study to facilitate meaningful conversations between strangers, the significant results of which spur a discussion of methodological considerations and future research directions.

# Stranger Danger? Removing Barriers to Social Connection through Meaningful Conversation

If asked to describe human nature in one word, "social" quickly comes to mind. The ability to form complex networks and relationships between people is a defining feature of our species, and it is no surprise that social connections are a large factor in our individual well-being. Breadth and depth of connections are not only predictive of holistic and subjective measures of well-being, but are also related to physical health (Eid & Larsen, 2008; Lucas & Dyrenforth, 2006; Cohen, 2004; Helliwell & Putnam, 2004).

One interesting question about human behavior, then, is if social connectivity is so important, why don't we interact with others more often in public? In the smartphone era, in particular, it is far from uncommon to see strangers waiting in line or sitting on the subway side by side without a single verbal exchange. Epley and Schroeder (2014) attempted to answer this question by exploring the calibration between beliefs and experiences regarding interacting with strangers. Their findings suggest that despite wanting to converse themselves, people expect that nearby strangers are less inclined to interact. This "pluralistic ignorance" dissuades interaction (Miller & McFarland, 1991; Vorauer & Ratner, 1996), even though such experiences are beneficial to both parties.

While Epley & Schroeder (2014) revealed the value of interaction with strangers in shared environments, they did not control or record the content of participants' conversations. It is possible that the type of conversation moderates

the success of an interaction, and if social norms dictate the way in which people interact (or avoid doing so), then they likely influence the topics of these conversations. An afterthought survey of participants suggested that many engaged in what could be considered "small talk", which aligns with traditional understanding of social interaction. Asking a perfect stranger about a deeply personal matter can be considered uncouth, and for the sake of social harmony, it is best to stick to "safe" topics. Small talk has an important social role to "define a mutually non-threatening relationship" and thus is a common occurrence between two people with no shared knowledge of each other beside their shared presence in time and space (Coupland, 2003).

In maintaining social order, small talk is an important tool, but engaging in lighter conversation is not an end goal in itself. Spending more time engaging in meaningful dialogue – reflecting on themes beyond everyday episodes – is correlated with happiness. As a percentage of conversation, the happiest people spend one-third the amount of time engaging in small talk, and twice as much time in meaningful conversation, as the unhappiest among us (Mehl & Vazire, 2010). Given the difficulty of recording and categorizing conversation over extended periods, sparse research has been able to test a causal relationship between meaningful conversation and well-being.

This paper introduces the idea of engaging in meaningful conversation with strangers. We examine existing beliefs about social interaction and meaningful conversation (Study 1), as well as comparing these beliefs to actual experience (Study 2). In addition to discussing the theoretical costs and benefits of these

experiences, we develop a unique methodology to facilitate meaningful in-person conversation with strangers (Study 3).

# Study 1

The objective of Study 1 was to establish the innate preferences of participants regarding social interaction with others. First, echoing Epley & Schroeder (2014), we sought to determine if people in shared circumstances sought isolation or interaction. Assuming they would choose the former, we then chose to examine the extent to which these preferences were shaped by the nature of potential social interaction.

Specifically, given the influence of social norms, we honed in on attitudes toward different types of conversation topics. As small talk is traditionally employed to assist social interaction between relative strangers, we sought to identify the presence of a bias towards shallower topics. If forced to interact with another, would participants be more willing to engage in "small talk", such as discussing the weather or music preferences, than they would be to choose deeper and more emotional topics? In addition, we hoped to identify which topics were most and least favored.

We hypothesized that given the choice, participants would avoid social interaction. Furthermore, if conversation with another were required, preference would be expressed for avoiding more emotional and difficult themes in favor of shallower topics.

#### Methods

# **Participants**

Seventy-one participants were recruited online using Amazon's Mechanical Turk (MTurk) platform, an online marketplace that provides access to a large, diverse population of workers that can complete a variety of short tasks at their own convenience. Potential participants were told they would be completing a survey about their preferences regarding MTurk studies.

Of the 71 that completed the survey, all but one answered each of the questions. This person's data was mostly incomplete, and thus was discarded for the purpose of analysis. Of the remaining 70 participants, 41 were male and 29 were female.

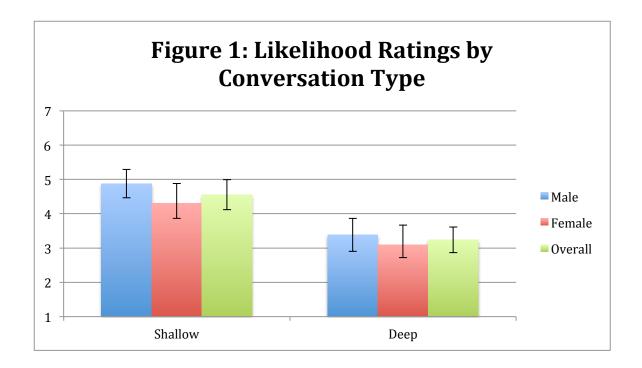
#### Procedure

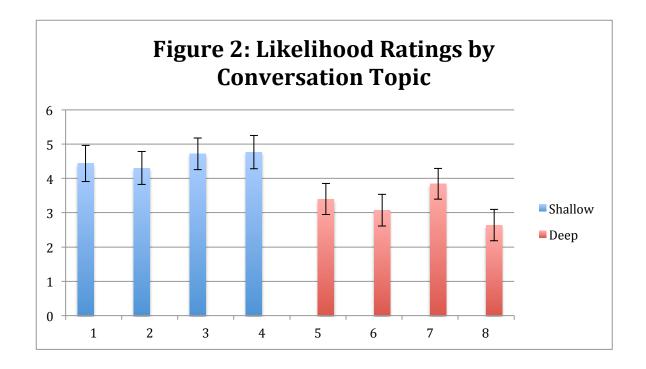
Participants were asked a series of questions about their preferences related to potential MTurk studies. First, each person indicated whether they would prefer to participate in an MTurk study alone or with another person. Afterwards, participants were presented with eight topics, four of which were considered "shallow" (e.g. movie/TV preferences, weather), and four of which were "deep" (e.g. dreams for the future, issues needing emotional support). For each topic, participants rated the likelihood (1-7) with which they would choose the topic for a hypothetical conversation with another MTurker. Finally, participants were asked to rank the eight topics in the order in which they would prefer to discuss them with another MTurker, ranking the most desirable topic first and the least preferred last.

### **Results**

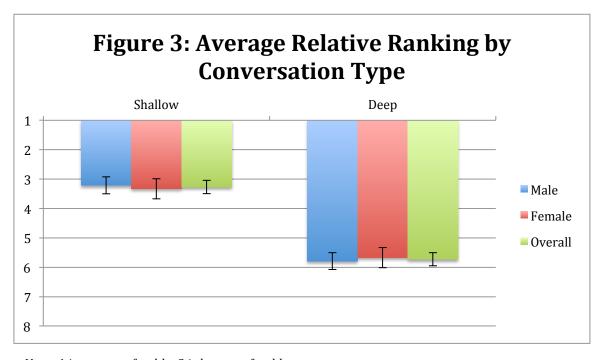
Participants expressed an overwhelming preference for participating in MTurk studies alone, versus interacting with another person. A full 60 of the 70 participants preferred isolation in this context. This effect did not differ with gender, as 85% of men and 86% of women chose solitude.

When asked about the likelihood that they would choose various conversation topics, participants expressed a preference for the shallower options (Figure 1). Ratings for each of the individual topics are presented in Figure 2. The effect of conversation type was significant, F(1,68) = 53.94, p = .000, and did not differ with gender.

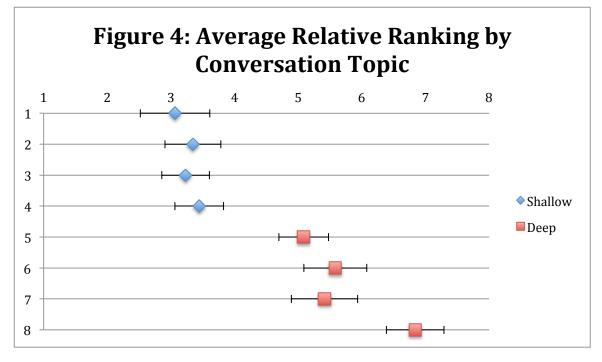




The ranked order of conversation topics reinforced these results. Participants again expressed a preference for shallower topics, F(1,68) = 119.73, p = .000, and this trend did not differ by gender (Figure 3). The average rank of each topic is presented in Figure 4.



Note: 1 is most preferable, 8 is least preferable



Note: 1 is most preferable, 8 is least preferable

### **Discussion**

While there was a clear preference for solitude over interaction, this effect is likely partially driven by the context underpinning the choice. Participants were asked a general question about their participation in MTurk studies, and thus the choice of solitude likely encompassed factors such as efficiency of completing tasks. The MTurk platform provides individuals with an opportunity to complete microtasks for financial compensation, and participants may have believed that working with another person on a task would take more time than completing it alone. (In Epley & Schroeder (2014), participants believed that talking to a stranger would result in a less productive commute, although those that were assigned to do so rated their commutes as more productive.) Of course, tasks that are longer and require authentic participation (i.e. collaboration) usually incentivize accordingly. Given the previous literature, and the staggering rate at which participants sought

to avoid interaction, we believe other factors besides economic efficiency were at play in this bias.

The preference for shallower topics of conversation was significant from the likelihood ratings alone, but having participants rank the topics in order provided a clearer picture of this trend. Figure 4 clearly demonstrates the bias, with the 95% confidence intervals of each topic in the shallow category fully distinct from those of the deeper variety. Collecting a relative ranking of the conversation topics also allowed us to identify the most and least favorable topics, which we used in Study 2. Emotional support was definitively the least preferred conversation topic, while we chose food preferences to represent "small talk", as it was ranked favorably by both genders.

# Study 2

After establishing a significant preference for isolation – or if unavoidable, shallow conversation with another – we wanted to compare these beliefs against actual experiences. Using the first set of responses, we set up an opportunity for new participants to have an experience either alone or with a stranger, engaging with either a shallow or deep topic.

Just as Epley & Schroeder (2014) showed that engaging with strangers was enjoyable despite a bias for solitude, we hoped to find that meaningful conversation was similarly worthwhile, contrary to clear preference for lighter topics. While these biases – for solitude and for shallow conversation – are significant, we hoped that challenging both would be beneficial. Despite the fear of discussing potentially

uncomfortable topics, having deep conversation, we believed, may instill a sense of meaning in participants, as well as form a bond between conversation partners.

Our hypothesis was that contrary to the preferences established in Study 1, participants would actually experience talking to a stranger and engaging in deep conversation topics more beneficial than experiencing solitude or shallow conversation. We expected that independent of the effects of social interaction, deep topics would increase meaningfulness and feelings of social connection.

#### **Methods**

# **Participants**

We recruited 212 new participants on MTurk for this round of the study. At the end of the study, participants were asked if they had completed the activities seriously, allowing them to withdraw their data from the experiment with no financial repercussion. From this question, we removed 14 participants from analysis, leaving 198 valid responses.

#### Procedure

Participants were assigned to one of four conditions according to a 2x2 between-subjects design. Each participant was assigned to experience solitude or interaction, in addition to deep vs. shallow topics. Based on the results of Study 1, we selected one of the least preferred deep topics – emotional support – as the "deep" topic, and one of the most preferred shallow topics – food preferences – as the "shallow" topic.

In the social interaction assignments, participants were asked to read and respond to one of two short letters from a fellow MTurker (although written by the researchers). For those also assigned to the deep topic, this letter discussed dealing with an emotional struggle, whereas for the shallow topic, the letter mentioned food preferences. For context, below is the letter shown to participants in the intersecting interaction and deep topic assignments.

"Hi,

My name is K, and I'm from San Francisco, currently in the midwest. I'm 34 and I am an economics specialist. I'm fairly active – I like to bike, swim, and do yoga. Lately, I haven't had the energy to be active though... You see my dog Mabel passed away recently and I've been feeling really depressed ever since. I don't even feel like myself anymore. All I do is mope around all day. I barely eat or sleep. I got Mabel when I first moved out in my early twenties. It's been really hard adjusting to life without her. The house seems so empty now. I miss her a lot. Do you have any pets? Anything you need emotional support for? I'd be happy to listen.

Hope to hear from you soon,

*K*"

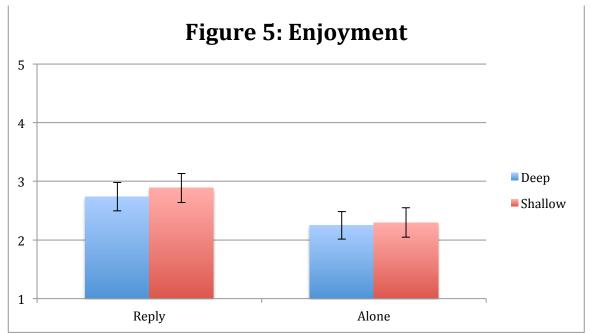
While not specifically instructed to discuss their own emotional struggles or food preferences, we asked participants in the social interaction conditions to reply to the letters with a few sentences, hoping they would naturally respond on topic.

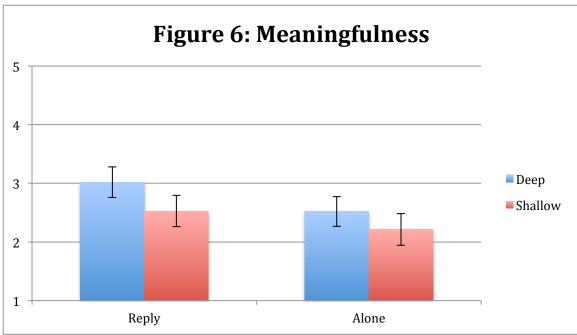
Those in the solitude conditions did not receive a letter from a fictitious pen pal, but were also asked to write a short note on the topic corresponding to their deep vs. shallow condition, imagining another MTurker would reply.

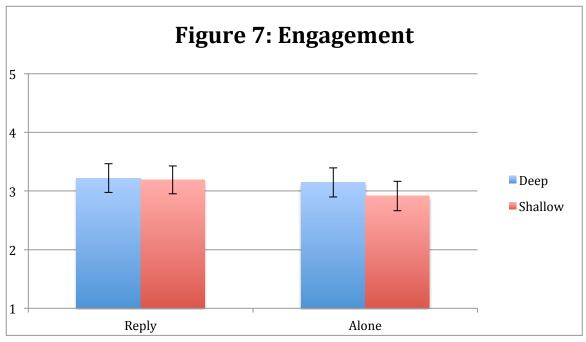
After writing the note, all participants were asked a series of questions about the experience and their current feelings. Each participant was asked to rate how enjoyable, meaningful, and engaging the task was, as well as how socially connected it made them feel. Using the same measures as Epley & Schroeder (2014), we also asked them to provide ratings of how happy, sad, socially connected, and lonely they presently felt. All of these ratings were presented on a 1-5 scale.

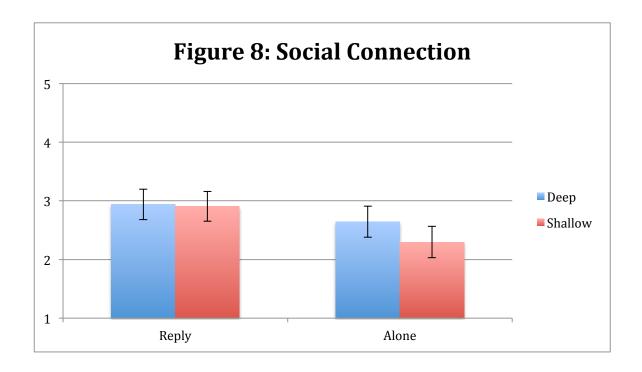
#### **Results**

Figures 5-8 depict the effects of each condition on the four main dependent variables. Participants in the social interaction condition had more positive experiences than those who were not responding directly to a letter. These differences were significant in terms of enjoyment F(1,194) = 18.87, p = .000, meaningfulness, F(1,194) = 9.35, p = .003, and feelings of social connection, F(1,194) = 11.32, p = .001. Although the difference was not significant, the direction of means suggests that discussing food preferences was more enjoyable than writing about issues needing emotional support. Participants found writing about emotional issues to be more meaningful, F(1,194) = 9.01, p = .003. Levels of engagement with the task did not vary across the conditions.





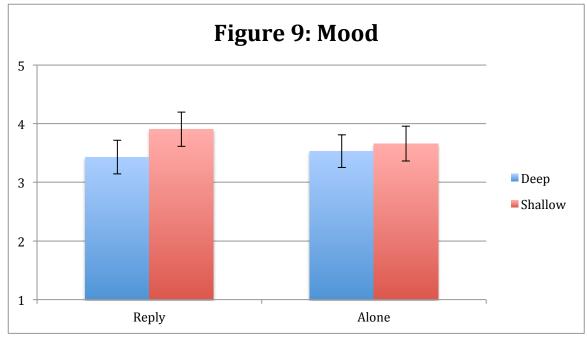


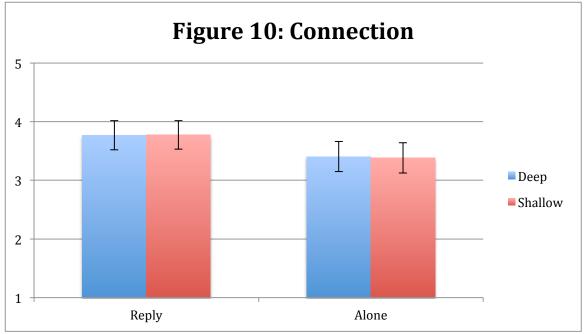


To further analyze the results, participants who were in both the interaction and deep topic conditions were compared to those in the other three conditions using 3v1 weighted contrast effects. The combinatory effect of these conditions was predictive of both meaningfulness, t(194) = 3.91, p = .000, and feelings of social connection, t(194), = 2.10, p = .037, and marginally significant for enjoyment, t(194) = 1.83, p = .068.

Following the model of Epley & Schroeder (2014), we combined the two mood questions into an index of positive mood by reverse scoring the sadness score and averaging it with their happiness score. We also combined the two connection items in a similar way by reverse scoring loneliness and averaging it with feelings of connection. To analyze participants' feelings, a mixed model repeated measures ANOVA was used with type of feelings (mood or connection) as within-subject factors, and the social condition (social interaction vs. writing a letter alone) and

letter topic (shallow vs. deep) as between-subject factors. Analyses revealed a significant interaction of type of feeling by social condition, F(1,194) = 7.38, p = .007, and between type of feelings and letter topic, F(1,194) = 7.74, p = .006. As can be seen in Figure 9, participants felt more positive after writing or replying about food preferences than for an issue of emotional support (likely due to the negative nature of the event requiring support). Figure 10 displays the effect of each manipulation on social connection, for which only social condition was significant.





#### **Discussion**

The results of Study 2 confirmed the benefits of social interaction, and revealed the nuances of grappling with difficult material. We believe that engagement with the task was not a precise enough measure for this study, considering that most MTurk tasks are far more repetitive and/or impersonal than any of the writing exercises completed by our participants. All participants were asked to write a few sentences about themselves, a task that, when compared with other MTurk studies, understandably received relatively high marks for engagement. Apart from engagement, the effect of social interaction was significant across the board.

Comparing the responses for deep and shallow topics was slightly more difficult, as the effects of this manipulation were only significant for ratings of meaningfulness. Isolating the effect of isolation vs. interaction, we did not expect any differences in feelings of social connection between the two topics. In addition, while discussing emotionally difficult situations may be a meaningful experience, it is not necessarily an enjoyable one. The promise of small talk (in general) is engaging in non-offensive and easily digestible conversation, and in the short-term, it is not surprising that people may prefer to talk about their favorite food than the rocky state of their marriage.

After teasing out the individual effects of these conditions, we wanted to examine our research question in broad terms – is engaging with a stranger in deep conversation beneficial? Contrast effects revealed that such an experience, compared to those of the other participants, inspired both meaningfulness and

feelings of social connection, in addition to marginally significant enjoyment. If meaningfulness can be thought of as a type of long-term benefit, while enjoyment is more of an immediate boost, this suggests that the enjoyment of interacting with a stranger may overcome the difficulties of engaging with deeper material. It may be that approaching a stranger is somewhat easier when one can hover around safe and mutually non-intrusive topics. Yet digging a bit deeper into a conversation with a stranger, we believe, may be less risky than with a friend: the knowledge that one may never see the other person again may provide an opportunity for an honest and vulnerable exchange.

The main difficulty for the experimental design was finding an appropriate control for the isolation condition. What is the real-life alternative to engaging with a stranger in shared circumstances? One may scroll through social media on their phone, read a book, listen to a podcast, or call a friend or family member on the phone. Of course, one can also reject all extraneous stimuli and remain silent, paying attention to their environment or entertaining whatever thoughts pass through their mind. What are the relative costs and benefits of these activities, and how do they compare to engaging in conversation with a stranger? This difficulty of dealing with this ambiguity was compounded by the fact that our participants were restricted to online tasks. To isolate the effect of social interaction, we had participants in the isolation condition think and write about the same topics as their counterparts, with the exception that they were not directly responding to another person's thoughts and experiences with the subject. This would be comparable, we think, to someone journaling on the subway, an activity that is likely at least as

enjoyable, meaningful, and engaging than what many commuters mindlessly engage in. While of course there are plenty of meaningful activities in which captive individuals can participate, one likely only has to look at those in line at a coffee shop to believe our choice of control condition provides a conservative estimate of the relative benefits of engaging in meaningful conversation with strangers.

#### **General Discussion of Studies 1-2**

The primary motivation for conducting Studies 1 & 2 online was to accumulate a large enough sample size to illuminate potentially significant effects. Study 2 required enough participants for a between-subjects design with four conditions, and we also deemed it necessary to recruit different populations for the two studies, as to avoid any within-subject confounds. (The ordered preferences of conversation topics were also used to design the letters in Study 2.) The results from Study 1 were robust enough for us to assume the preferences were representative of a general population, allowing us to directly compare the beliefs of the first set of participants to the experiences of the second group.

The major limitation of online studies, of course, is that the interactions are not representative of the social interactions of interest for the research questions. (Also noteworthy is the fact that, since we would be asking about participants' experiences on MTurk in Study 2, we asked about participants' preferences specifically related to MTurk in Study 1, a decision that prioritized internal consistency rather than external validity. In reality, we were not interested in people's social preferences about MTurk, but wanted to have a direct comparison

between preferences and experiences between the two studies.) For the sake of control, we limited communication to one note of a few sentences, with participants receiving no feedback to their letter. Unlike real conversations, there was no continuous back-and-forth, and requesting a truncated cross-section of a dialogue was unlikely to inspire the same depth of communication as a conversation in which questions could be both asked and answered. While many participants took the writing activity seriously, most of them likely knew that their note would produce no response, and possibly that the letter they received (for those in the interaction conditions) was fabricated. Further missing were all of the visual, auditory, and other non-verbal cues that animate an offline social interaction. Much is communicated through eye contact, body language, and vocal inflection, and we expect that conducting a similar, yet offline, experiment – with longer and more genuine interactions – would produce more significant and enlightening results.

Although other methodological designs were considered, such as having multiple MTurkers communicate in real-time or chat with a confederate, these would have presented their own set of challenges. Studies 1 & 2 were ultimately effective in highlighting and supporting our hypotheses about the misguided biases for isolation and small talk in the presence of strangers. Yet the limitations mentioned above were motivation for a different approach to our research questions.

### Study 3

While Studies 1 and 2 provided some theoretical evidence for our hypotheses, we sought to further investigate our research question with a more externally valid approach. Referring back to our original question of why people don't interact in public, we wanted to move beyond digital platforms to study actual in-person interactions. This is particularly important in a world that enables us to communicate through an increasing number of digital mediums, often without seeing another's face or hearing their voice – if one is communicating with a human at all. Trading control for validity, we sought to create an exploratory study that deviated from the methodology of the previous experiments. As discussed in the previous section, measuring the relative benefits of meaningful conversation with strangers is difficult due to the ambiguous nature of a control condition. Instead of comparing effects across conditions, we wanted to explore if the experience itself was perceived as worthwhile to individuals. The primary question, then, for Study 3 was how to put our theoretical findings to work. Knowing deep conversation with strangers was a meaningful experience, how could we overcome the inherent biases for small talk and solitude? Is there an effective way to encourage and facilitate such experiences outside of an experimental or academic setting?

These questions prompted a collaboration with "Project Conversation," a student organization whose mission was to connect undergraduate students and facilitate genuine conversations on campus. We assisted Project Conversation (P.C.) as the organization iterated and refined its methodology for the better part of an academic year, before officially researching participants. In striving to facilitate

social interaction, the foundational design premise of P.C. became overcoming pluralistic ignorance. According to Epley & Schroeder (2014), who identified this phenomenon as a major reason people avoid public social interaction, "pluralistic ignorance, whereby people consistently think others are less interested in connecting than they are themselves, not only could make an attempted conversation seem unpleasant but could also create a barrier to learning that one's expectations are mistaken" (pg. 1986). To keep such beliefs from inhibiting social interaction, we designed an opt-in system that removed the burden of initiating interaction from the individual. By signing up, students were guaranteed to match with someone who had also expressed a desire to participate. We expected that such a system would remove the potential awkwardness of approaching a stranger and engaging in conversation – a discomfort usually addressed by participating in small talk. This design should thus not only help initiate conversations, but also allow the participating individuals to open themselves to more difficult and intimate topics.

#### Methods

# **Participants**

Students were recruited for the study mainly through word of mouth and online social media. Information about P.C. was distributed through Facebook, and experimenters also notified classmates about the opportunity. P.C. was marketed not as an academic study, but as a student-led project that facilitated meaningful conversations between strangers. The sign-up form contained the following introduction, with further detailed instructions on how to participate:

"We started Project Conversation to give students an opportunity to have meaningful conversations with students across all of campus. We provide a platform for you to talk to somebody new without the awkwardness and social stigma of reaching out to strangers. It's not a dating app or a friend making service - it's about the conversation, and it's not expected that you stay in touch afterwards."

In the initial few months of methodological tests, 31 students partook in at least one iteration of P.C. When formal research commenced in the spring, 60 signups were garnered over a three-week period. Due to individual logistical and/or communication issues, only 42 continued to interact with another student, with 38 of these completing the post-interaction feedback form needed for data analysis. Six students participated twice, and their second round of data was excluded. This left 32 unique participants who completed the post-conversation survey.

#### **Procedure**

Participants signed up through a link that directed them to an online form with a short participation survey. University emails were required to view and complete the form, but names were not recorded with submission. The form collected contact information (email and phone number); basic demographic factors such as gender, race/ethnicity, and year in school; answers to a few mood questions; and specific availability to participate in the experiment. Adapting measures again from Epley & Schroeder (2014), we collected pre-test measures of happiness, sadness, and feelings of social connection. Participation was limited to five one-hour timeslots that were pre-selected for the week by the experimenters. These timeslots were

randomly distributed across the week (one on each weekday) during times available to the experimenters. Respondents indicated availability for each of these time slots, and were notified via email by Sunday night of the timeslot to which they were assigned for the upcoming week. (If participants were unable to be matched, they were asked to participate during the next round of conversations.) The time slots were updated each Sunday for the following week.

Each morning, an automated text message was sent to participants scheduled to meet that day, using the service TextMagic. The message contained the specific location for meeting their partner at the assigned time (all locations were within the university student center). Participants were also instructed to respond to the message when they had found their partner, which prompted an automatic response from TextMagic that contained a link to further instructions. Experimenters used TextMagic to communicate in real-time with participants if needed, for example, if a participant was running late, or in extreme cases, needed to reschedule.

When matched pairs identified each other at their assigned meeting spot, they found a place to sit for the next hour, and replied to the morning's text to receive further instructions. The ensuing auto-response text linked to a document with a general description of the next hour's activities. First, the document asked participants to avoid conversation that they would consider "small talk", and suggested that conversation does not revolve around student life at the university, such as classes and extracurricular activities. To inspire deeper conversation, the document featured a few questions that participants could choose to discuss with

each other. The document was updated each week with different themed questions, covering topics such as family relationships, hopes and fears for the future, and how one has changed since starting college. It was not required that participants answer these exact questions, although participants could use them as they wished. In addition, the document reminded participants that their interaction was scheduled for one hour, and that they would receive a final automated text message five minutes before the hour was up. This final message included a link to the post-interaction survey, which participants were asked to complete immediately. Responses were also required for entrance into a drawing for one of several Amazon gift cards.

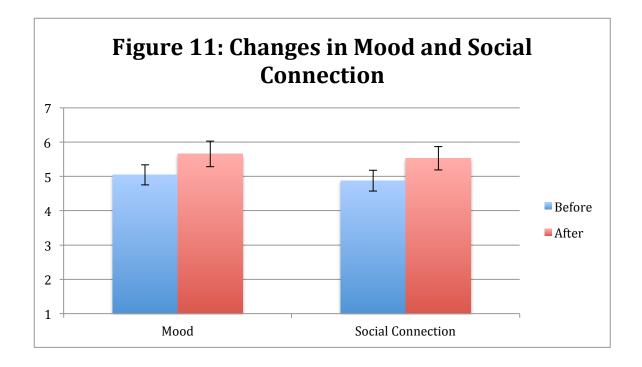
This final survey collected participants' thoughts about the interaction, as well as the measures of happiness, sadness, and feelings of social connection from before. While the survey was anonymous, participants entered their phone number on this survey in order to match responses to pre-test measures and confirm participation in the drawing for compensation. Participants were given no further instructions about their interaction, and, after completing the final survey, were allowed to continue the conversation with their partner if desired. We expected that some partners would exchange contact information and form relationships after this point, but identifying further outcomes was not the purpose of the study.

#### **Results**

Two sets of data were used to analyze the experience. First, within-subjects paired t-tests were used to compare participants' change in mood and feelings of

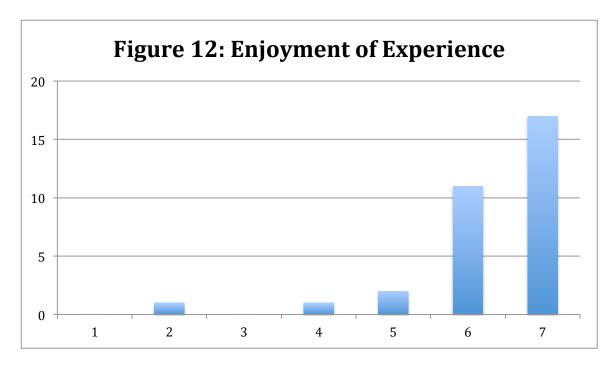
social connection, as collected during sign-ups and directly after social interaction. Additionally, participants were asked about their holistic experiences about the project. The post-interaction form collected measures of enjoyment, the likelihood of participating in a similar experience again, and the likelihood of recommending such an experience to a friend (1-7).

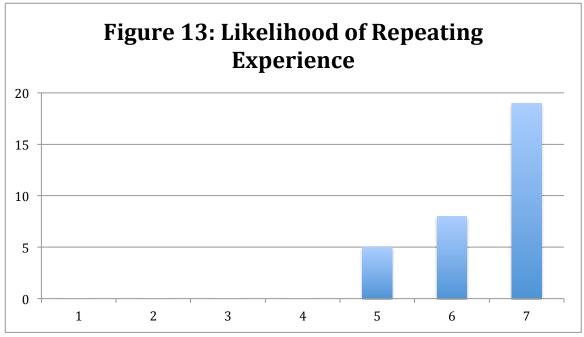
Feelings of happiness and sadness were recoded into a composite mood measure. The changes in mood and feelings of social connection are depicted in Figure 11. The effects of conversation on both measures were significant, t(31) = 3.40, p = .002 for mood, t(31) = 2.64, p = .013 for social connection.



Holistically, the large majority participants had favorable experiences. Responses for holistic measures are shown in Figures 12-14. The median response for each of the three questions was 7, with only a handful of participants reporting less than ideal experiences. Additionally, all but one of the participants asked to be

notified if/when future rounds of P.C. were open for sign-ups. (The single person who passed indicated that she would be graduating in a few weeks and likely would not be available.)







### **Discussion**

As measured by the increase in mood and feelings of social connection, participants found the experience to be beneficial in the moment. While measures were not recorded at a later time, results from Mehl & Vazire (2010) suggest that increasing the amount of meaningful conversation may boost individual well-being over a longer time period. Although most participants expressed a desire to participate in a similar experience again, there is evidence that may suggest one conversation is enough to sustain long-term benefits. Participants said they were slightly more likely to recommend the experience to a friend than to participate again, and the difference between these means was marginally significant, t(31) = 1.98, p = .056. If one understands the likelihood of recommendation to be an objective measure of value (assuming participants have friends' best interests at heart), then the slight decrease in likelihood of personally repeating the experience represents a decrease in marginal value for the participant, suggesting that the first

experience may be more important than subsequent conversations. Similarly, participants provided higher levels of recommendation than levels of enjoyment, t(31) = 1.82, p = .078, suggesting some recognition of the objective value of participating in the experience, despite one's personal experience. Overall, more than 90% of participants reported a 6 or 7 (on a 7 point scale) for the likelihood of recommending the experience to a friend (with the other three participants providing a 5), suggesting people understand the value of engaging in a meaningful conversation with a stranger.

While certainly encouraging, there are a few reasons for a bit of healthy skepticism about the significance of the results. First, while large enough for statistical significance, the sample size is not robust. Four people participated and did not fill out the post-interaction survey, potentially biasing the results. (Anecdotally, though, we know that these participants had very positive experiences: when asked later, both pairs reported striking up a long conversation without ever looking at the instructions.) The high attrition rate among participants – many had last-second emergencies, also voiding the experience for would-be conversation partners – is also a potential cause for concern, yet we have no reason to believe that those who never met their partners would be more or less likely to benefit from the experience. (Many of these people ended up participating the next week with a new partner anyway.)

Even if Study 3 consisted of a larger sample, the population from which participants were recruited still serves as a limitation. All participants were undergraduate students at the same university, and thus were guaranteed to have

much in common with their conversation partners. Although results from the postinteraction survey confirmed that all pairs were perfect strangers, each participant entered the interaction with a shared set of experiences and institutional vocabulary. This in theory would make small talk quite easy – participants could ask about classes or extracurricular activities - but instructions encouraged them to engage in more meaningful conversation. Still, it is likely that there was an understood commonality between pairs, providing a foundation of trust and social connection that could facilitate more enjoyable and intimate conversation. This guarantee of meeting with a fellow undergraduate student may have also influenced the perceived risk of the interaction. On one hand, students faced less uncertainty about the person they would meet with (compared to a partner selected from the population at large). The flipside of selecting from a contained population is that while partners were less likely to be complete strangers before meeting, there was also a chance of encountering each other in the future. Revealing secrets to a stranger on the subway in New York City promises a level of anonymity that isn't guaranteed in talking to someone who may be in a future class of yours or eventually date a mutual friend. Finally, participants were volunteers who expressed interest in having a meaningful conversation with a stranger, so it cannot be assumed that any student chosen at random would have as positive of an experience as those reported by participants. Unlike Studies 1-2, which recruited random and diverse samples, Study 3 cannot promise a more universal enjoyment of the treatment.

Project Conversation and the methodology of Study 3 were designed for a specific population and environment. Thus, as discussed above, the results are not entirely representative of how strangers in other contexts would experience meaningful conversations with each other. Improvements to P.C. could be made to better fit a larger and more diverse population (e.g. developing a mobile platform to streamline matching and communication), but in some ways the study is fundamentally different than how strangers normally interact. One major question is the issue of timing. Participants of Study 3 were required to block an hour of time for a conversation, whereas natural conversations with strangers are usually spontaneous and fleeting. This is probably partially due to the shallow nature of the conversation (how long do you want to talk about the weather?), but the shared circumstances that promote these interactions are also usually not shared for long (how likely is someone to share their childhood dreams before they order their coffee?). Unless two people have time to spare and can inhabit the same space for an extended period (maybe in a café or a bookstore), it is unlikely that a meaningful conversation will flourish spontaneously. In a "real-world" interaction, one also usually has the ability to opt-out of the conversation – although social norms may make this hard, say, on an airplane - while our participants were committed to at least the hour they had signed up for. If one believes the only way to understand the benefits of meaningfully interacting with strangers is to perfectly replicate the manner in which most interactions naturally occur, then Study 3 would not be the ideal research technique. Yet P.C. provides an alternative to the traditional approach, creating value through the methodology itself. Thus, while a system like

P.C. is not fully representative of how strangers may interact in the "real world" today, it at least presents opportunities for further research, and potentially an opportunity for how strangers can meaningfully interact in the future.

#### Conclusion

This work provides further evidence that despite our inherently social nature, people often choose not to interact with others, especially in meaningful conversation – even though this is a positive and valuable experience. Engaging in conversation that ventures beyond small talk may be intimidating, especially with a complete stranger, but it is often worth this risk.

This paper also highlights several opportunities for future research. There is still a dearth of literature on the immediate and long-term effects of small talk versus meaningful conversation, and this is one of the first attempts at investigating these dynamics with conversations between strangers. In particular, related to the discussion of population samples in Study 3, it would be worth exploring how beliefs about meaningful conversation differ depending on the familiarity between conversation partners. A conversation with a complete stranger may act as a hurdle to establishing shared ground but also as a promise of anonymity, and one of these factors may be stronger in promoting authenticity and vulnerability in conversation. Additionally, larger sample sizes should allow future research to identify trends relating to partner characteristics. For example, do people benefit more from talking to someone of a different race or gender? Figuring out who benefits most from these

conversations could open the door to cultivating empathy and understanding across populations.

A methodology like that employed in Study 3 is not the traditional research approach for exploring the dynamics of naturally occurring interactions between strangers. But by following the literature, we have devised the framework for a platform that we believe can contribute to society as much as it studies it. If the ultimate goal of academic research is to better understand the world around us for the sake of improving collective well-being, then it behooves us not to just observe reality but also to alter it when applying findings can serve the greater good. Ideally, something like Project Conversation can serve as a supplement to the way in which strangers interact. According to Schroeder & Epley (2014), one of the reasons we underestimate the enjoyment received from talking to strangers is because our beliefs fail to calibrate to our experiences. P.C. may serve as an opportunity to facilitate conversations in order to continuously update beliefs, giving people the confidence to initiate social interactions with strangers on their own.

We live in a world that is increasingly supportive of our innate biases against interacting with strangers and engaging meaningfully with others, as technology gradually removes risk in favor of comfort and immediate gratification. Although technology promises more connection than ever, it is those who engage with others offline who experience the greatest feelings of connection (Sherman et al., 2013). For thousands of years, our species interacted solely through face-to-face conversation, and while technology surely has its benefits (such as supporting long-distance relationships), it is important as ever to realize the importance of

meaningful, in-person conversation. As Sherry Turkle, the author of *Reclaiming Conversation*, said, we are living "moments of more, and lives of less." An endless stream of curated content ensures boredom never comes calling, so why risk a conversation with another person in line for coffee? By immediately plugging in headphones on the airplane, we avoid discomfort but pass up the chance to chat up the person across the aisle who may gift us a new perspective on an ailing friendship. We supposedly live in a hyperconnected age, but we are constantly passing up opportunities for connection with others and ourselves. Talking to those we feel we are least connected to may be a step forward. Small talk is a natural and important element of society's social fabric, particularly when connecting mutual strangers – context often dictates that people adhere to safe topics. Yet if there is value in engaging strangers in meaningful conversation, then it is worth challenging the status quo to facilitate more of these experiences.

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