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Caught in the Act: How Extraverted and Introverted Friends Communally Cope with Being Recorded

Avril Thorne^{a,*}, Lauren Shapiro^a, Kim Cardilla^a, Neill Korobov^b, and Paul A. Nelson^a

^aDepartment of Psychology, University of California at Santa Cruz, 1156 High St., Santa Cruz, CA 95064, USA

^bDepartment of Psychology, University of West Georgia, 1601 Maple St., Carrollton, GA 30118, USA

Abstract

This study explored how close friends who were similar or opposite on extraversion communally coped with being put on the spot to produce a recorded conversation. Participants were 50 pairs of same-sex college-age friends (54% female) who explicitly discussed the fact that their conversation was being recorded. The initial 'on-stage' episode emerged consistently earliest for extraverted dyads, and the majority of their episodes quickly diverted the on-stage moment. Dyads that included at least one introvert engaged in more extensive assortments of on-stage maneuvers, including research talk, soothing, and joking. In introvert-extravert dyads the extravert usually initiated and ended these episodes. Implications are discussed for understanding how personality is reciprocally implicated in managing shared everyday problems.

Keywords

Extraversion; Introversion; Communal coping; Interpersonal behavior; Friendship; Person-situation interactionism; Conversation

Eva: Where did you eat at?

Inez: Um, just the bagel place.

Eva: Oh. Was it good? *This feels really weird.*

Inez: *Yeah, I know. I don't like this.*

Eva: *Okay.*

Inez: *Like with the FBI or something*

Eva: *I know, well.* So, yeah, did you have a good time last night?

In our recordings of conversations between friends we have encountered plenty of brief exchanges about being recorded, like the above example. Such exchanges seemed a stark departure from the natural sounding dialogue that characterized most of the conversations, which were replete with gossip and stories about romantic concerns (Korobov & Thorne, 2006, 2007; Thorne, Korobov, & Morgan, 2007). Another way of viewing such talk is that it

* Corresponding author. Fax: +1 831 459 3519, E-mail address: avril@ucsc.edu (A. Thorne).

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a natural way of coping with a shared stressor and of using the stressor as an interactional resource (Speer & Hutchby, 2003).

Communal coping refers to the process by which a stressful experience is collaboratively managed in the context of close relationships (Lyons, Mickelson, Sullivan, & Coyne, 1998). The concept of communal coping was designed to rectify an individualistic bias in the coping literature. Like much personality research, coping research traditionally has viewed individuals as independently appraising and managing problematic situations. However, regardless of whether a stressor initially is experienced individually or collectively, coping is often a social process, embedded in particular relationships (Berg, Meegan, & Deviney, 1998; Lyons et al., 1998). For example, a mother's stress at work can be experienced by her children at home, and a student's impending classroom presentation can impact a roommate's peace of mind.

Being thrust into the recording spotlight can produce a mild form of stress that may engender communal coping. Although communal coping research has mostly focused on momentous life events such as losing a job or a loved one, coping with daily stressors has been found to be more highly associated with emotional and physical health than is coping with major life events (e.g., DeLongis, Coyne, Dakof, Folkman, & Lazarus, 1982). For example, in a longitudinal study of college students daily hassles such as interruptions while working were more highly correlated with psychological symptoms than were more momentous events such as the loss of a friend or a romantic breakup (Wagner, Compas, & Howell, 1988). Such findings have led to heightened interest in studies of communal coping with mundane stressors and the role of personality differences therein (Berg et al., 1998).

The personality dimension of extraversion-introversion would seem to be a good candidate to explore how personality is reciprocally implicated when coping with the problem of being put on the spot to produce a recorded conversation. Past research suggests that individuals on the introverted end of the continuum ("introverts") would experience such situations as particularly intrusive, because introverts describe themselves and are described by others as private, quiet, and reserved (Costa & McCrae, 1985; Stone, 1986; Thorne & Gough, 1991). People on the extraverted end of the continuum ("extraverts") generally are more comfortable being put on the spot. For example, in a study that asked undergraduates to rate their level of embarrassment while imagining a series of hypothetical scenarios, extraversion correlated negatively with embarrassment at being thrust into the spotlight (Sabini, Sipmann, Stein, & Meyerowitz, 2000).

How might friends who are similar or different with regard to level of extraversion communicatively cope with being thrust into the spotlight? Because introverted people are less prone to self-disclose in general (Levesque, Steciuk, & Ledley, 2002), they might avoid talking about the fact that they are being recorded and just try to proceed with a 'regular' conversation. Extraverted people, on the other hand, may more readily communicate the fact that they are being observed as a way of clearing the air before moving on to a regular conversation. Because extraversion-introversion tends to be contagious, these differential tendencies toward open disclosure may be amplified when talking with a dispositionally similar friend (Eaton & Funder, 2003; Thorne, 1987). In other words, two introverted friends may be particularly likely to delay talking about feeling exposed, whereas two extraverted friends will be particularly prone to talk about the exposure right away. And what about an extravert with an introvert? Prior research has found that friends tend to converge over time with regard to emotional responses and that the responses of the more socially powerful friend tend to be adopted by the less powerful friend (Anderson, Keltner, & John, 2003). Because extraverts generally are more socially powerful than introverts, their response to a situation of shared exposure may prevail; that is, the extraverted friend may more readily address the fact that they are being observed and the introverted friend will then join in.

These expectations are tentative because no studies to our knowledge have examined extraversion and communal coping in general or in recorded conversations, in particular. Our coding system measured the latency of the first comments about being observed, and attended to the length of any such exchanges. We then devised quasi-inductive categories to capture particular kinds of on-stage maneuvers. We also examined interviews about the conversations to understand the phenomenology underlying such maneuvers.

Method

Participants

The on-stage sample consisted of 50 pairs of same-sex friends. Seventeen pairs were extremely extraverted (8 male, 9 female), 14 pairs were extremely introverted (10 male, 4 female), and 19 pairs were mixed (one extremely extraverted, the other extremely introverted; 5 male, 14 female). Dyads were undergraduate students attending a public university in Northern California. Their mean age was 19.5 ($SD = 0.97$) and they had been friends a median of one year. They were selected from a larger sample of 66 pairs of friends because they produced at least one on-stage episode in their conversation.¹ One partner was recruited through pre-testing in a large psychology course and earned credit toward a course requirement by participating in the study. Each recruit brought along a friend whom they had known for at least six months and who was compensated \$20. For socio-linguistic purposes, participants were required to be native speakers of English; 90% self-identified as white or European American.

Measures

Extraversion-Introversion scale—Participants were recruited on the basis of scores on 10 items from the extraversion-introversion (E-I) scale of the Myers-Briggs Type Indicator (MBTI), Form M (Briggs & Myers, 1998). The internal consistency of the 10-item scale was acceptable ($\alpha = .83$). The MBTI E-I scale correlates robustly with other commonly used extraversion scales (see McCrae & Costa, 1989; Thorne & Gough, 1991). The forced-choice items (1 = introverted direction; 2 = extraverted direction) mainly refer to sociability versus reserve in general social settings. Scale scores ranged from 10 to 20, with higher scores indicating extraversion.

Friendship ratings—Participants completed a survey about the quality of their relationship, including the length of their friendship in months, and friendship closeness (“How close do you feel to this friend, compared to your closest same-sex friend?”). Friendship closeness was rated on a scale from 1 (not at all) to 5 (very). These two variables also were analyzed in a prior study drawn from the same data archive, which compared storytelling practices of extraverted versus introverted dyads (Thorne et al., 2007).

Procedures

Pre-test—One member of each dyad was part of a pre-test group, averaging 250 students per quarter, recruited between Fall, 1999, and Spring, 2002. Students were administered a survey in large psychology courses; the survey included 10 E-I items and demographic questions (gender, age, ethnicity, native language). To determine cut-offs for recruiting extraverts and introverts, E-I scores in the Fall, 1999 pre-test sample were compiled into a distribution ($M = 15.2$; $SD = 2.9$, range = 10 - 20), and students scoring in the upper and lower quartiles were identified as candidates. The scores for extraverted candidates ranged from 18 - 20, and for

¹The original sample ($N = 66$ dyads) consisted of 19 introverted (11 male, 8 female), 22 extraverted (10 male, 12 female), and 25 mixed pairs of friends (7 male, 18 female). Despite our intensified, albeit covert, recruitment efforts for male mixed dyads, we fell considerably short.

introverted candidates ranged from 10 - 12. These cut-offs were maintained for subsequent pre-test samples, which showed very similar distributions.

Recruitment—Candidates falling within the designated ranges on the E-I scale were contacted by telephone approximately one week after pre-testing and invited to participate in a “friendship study.” Students who expressed interest were asked to bring along a same-sex friend whom they had known for at least six months, and were informed that the study would take approximately two hours. Candidates were told they could receive credit toward a course requirement and that their friend would be compensated \$20. The nature of the study was not revealed until after the participants arrived.

Catch-up conversations—Each dyad was greeted by a same-sex undergraduate research assistant who escorted them to a comfortable room decorated with children's art and seated them on couches positioned at a right angle. The study was described as an exploration of conversations between friends and consent was received to audio-record a 10-minute conversation that would be kept anonymous. The instructions for this conversation were intentionally kept vague so as not to restrict conversational topics; participants were simply told to catch up and talk about anything they chose. At no point were the participants given information suggesting that the study concerned personality. Participants were only told that the research was investigating the dynamics of friends' conversations. The research assistant then turned on the tape recorder, which was plainly visible, closed the door, and returned after 10 minutes. Each conversation was transcribed and independently checked for accuracy.

Playback interview—At the end of the conversation the research assistant interviewed one of the friends in an adjacent private room while the other friend completed some surveys; they then switched places. The informant was told that we were interested in the nature of their friendship and in how their conversation had unfolded. The interviewer emphasized that the informants were the experts on their friendship and that we welcomed any insights they could provide about the dynamics of their relationship in general, and the conversation in particular. Pertinent to the present study was the second half of the interview, in which the audio-recorded conversation was played back. The informant was invited to stop the audio-playback at any time to discuss what was happening in the conversation, and the interviewer did the same. For example, if the friends started to laugh in the conversation, the informant or the interviewer might pause the tape recorder to explain the laughter. There was no set protocol for the playback interview other than to try to understand the conversation from the point of view of each friend. The interview was audio-recorded and typically lasted 30 to 40 minutes.

Questionnaires—The friendship survey was administered first, followed by the MBTI. The MBTI was administered in order to determine the personality score of the friend who had been brought along. Cutoff scores for the friend were relaxed by one scale point in order to maximize the sample size, resulting in a range of 17 - 20 to identify extraverts and 10 - 13 to identify introverts.²

Debriefing—Participants were not informed that extraversion-introversion was the focus of the research; the decision to withhold this information was made when a prior study found that informing the participants of this fact tended to enhance their tendency to stereotype each other (Thorne, 1987).

²Because extraversion tends to be moderately negatively associated with neuroticism, a neuroticism measure (Benet-Martínez & John, 1998) was administered after the MBTI. Dyads differed significantly in neuroticism, $F(2,47) = 4.31, p < .05$, partial $\eta^2 = .17$. Tukey post hoc tests revealed that extraverted dyads scored significantly lower on neuroticism than introverted and mixed dyads, who did not differ on this measure. However, neuroticism was not significantly associated with the frequency of on-stage episodes, $r(50) = .04, p = ns$, or with the prevalence of particular kinds of on-stage maneuvers, $r(50)$ ranged from $-.04$ to $.03, p = ns$.

Coding of Conversations

Coding categories were developed by examining a random subset of transcribed conversations to discern how to identify on-stage episodes and their various forms. Weeks of discussion and pilot testing resulted in a reliable coding rubric. Coders were two of the authors and an undergraduate research assistant, all of whom were blind to participants' personality test scores. About 60% of the conversations were randomly selected for reliability coding, which occurred throughout the coding process in order to prevent coder drift. The coding system is available from the authors (Cardilla, Korobov, & Thorne, 2006).

On-stage episodes—On-stage episodes seemed quite distinctive because they broke the flow of the conversation. In the following example, Eddie is recounting a story about a friend who got poison oak. Isaac then interrupts with “Do you think it's been ten minutes,” referring to the length of the recorded conversation. The ensuing on-stage episode ends when Eddie shifts the topic, in this case, by asking whether another mutual friend, Alan, is upset with Isaac. The on-stage episode is in italics:

Eddie: He had like those freckles all over. They looked like that and that, they were from poison oak, he said (Isaac: Wow) he like got this rash and then they showed up and never went away.

Isaac: Damn.

Eddie: I know.

Isaac: *Do you think it's been ten minutes?*

Eddie: *I don't know. What time is it now?*

Isaac: *I don't know.*

Eddie: *Well, let's just assume we came in here and seven, three more minutes then.*

Isaac: *All right.*

Eddie: *Like eleven thirtyish.*

Isaac: *Yeah.*

Eddie : So, Alan is pissed off at you?

On-stage episodes consisted of an on-stage bid, ensuing talk in response to the on-stage bid, and an on-stage exit. *On-stage bid* was defined as the first utterance that introduced an on-stage episode, such as “Do you think it's been ten minutes,” in the above example. Bids were identified as any comment that centered on the recording equipment, the assigned task (to engage in a brief ‘catch-up’ conversation), or the fact that the recording would be listened to. Discussion of recording equipment included any mention of the tape recorder or microphone. Also included was mention of anything related to the current research or the strangeness of the situation. References to being listened to or recorded included discussion of the sound quality of one's voice, the idea of one's conversation being listened to, or concern about the appropriateness of the conversation. *On-stage exit* was defined as the first utterance that terminated reference to the on-stage episode, such as “So, Alan is pissed off at you?” in the above example.

Latency of first on-stage episode—The duration of talk prior to the emergence of the first on-stage episode was indexed by a computer count of the total words uttered between the beginning of the conversation and the first on-stage bid.

Who initiated and ended the on-stage episode—Coders indicated which speaker initiated the on-stage episode (that is, produced the on-stage bid), and which speaker exited or terminated the on-stage episode by shifting to another topic ($kappa = .84$).

Kinds of on-stage episodes, or maneuvers—Once all of the on-stage episodes had been marked in the transcripts, we carefully compared their content to discern different approaches to managing the predicament of being put on the spot. After a number of iterations, we settled on four different kinds of maneuvers that seemed to capture the variety of ways in which on-stage moments were narratively managed. The four maneuvers seemed to be sufficiently apparent and prevalent to make systematic coding worthwhile. We defined the maneuvers as mutually exclusive, which seemed appropriate for most of the episodes.

The four kinds of maneuvers were divert, joke, soothe, and research talk. An example of each maneuver is shown in Table 1. A *divert* maneuver was coded when, following an on-stage bid, a speaker immediately switched to off-stage talk. Sometimes the divert response was a one-sentence interlude in a lengthy speech by one speaker, such as a brief reference to the microphone cord being tangled. The example in Table 1 entails one speaker initiating an on-stage bid (“OK, so this is kind of awkward”) and the other speaker diverting the on-stage bid by switching to a different topic (“So today Elise came by”). *Joke* was coded when the on-stage episode centered on humorous exchanges. Joking often entailed taking on a different persona, such as talking in strange accents, pretending to be TV talk show hosts, pretending to be criminals who were stealing the recording equipment, or laughing about what it would be like to pull out a bottle of whiskey and get drunk during the conversation. *Soothe* was coded when an on-stage bid, such as “This is awkward,” evoked an exchange that was positive, non-sarcastic, and non-joking, affirming the discomfort, such as “It feels weird to me, too, it’ll be over soon.” A final category, *research talk* was coded when the on-stage episode centered on non-joking talk about the research situation, for example, exchanging ideas about the purpose of the study (e.g., “I wonder if this is really a study about how men don’t know how to talk to each other but women do.”) On-stage episodes that could not be captured by one of the above categories were coded as *other*. Reliability for these coding categories was very good ($kappa = .89$).

Results

Data Analysis Strategy

Dyad as the unit of analysis—Because conversations are joint productions, the dyad rather than the individual was the unit for analyzing most of the on-stage patterns. We also used the dyad as the unit of analysis for the friendship ratings; this was justified by the similarity between target (the person initially recruited) and partner (the friend who was brought to the study) with regard to ratings of friendship closeness and friendship length (reported in Thorne et al., 2007). Dyadic indices were computed by summing the two friends’ placements on each measure and dividing by two.

Computing the prevalence of particular kinds of patterns—Because there was considerable variability across dyads with regard to the frequency of on-stage episodes, percentages were used to index the relative prevalence of each kind of maneuver. A percentage metric gave equal weight to each dyad regardless of how many on-stage episodes the dyad produced. For example, a dyad with one on-stage episode, such as one divert, received the same weight for divert as a dyad with four on-stage episodes, all of which were divert. Percentages were computed by dividing the frequency of each kind of episode by the total number of on-stage episodes. For example, if a dyad produced a total of four on-stage episodes, three of which were divert and one was joke, the prevalence of divert was .75 and of joke was .

25 for this dyad. A similar procedure was used within mixed dyads to compare the percentage of on-stage episodes initiated and ended by the introverted versus extraverted partner.

Statistical analyses—To take into account the possible influence of gender, data were analyzed with 3 (dyad personality) $\times$ 2 (dyad gender) ANOVAs. Because particular kinds of on-stage episodes were proportional and therefore interdependent, kinds of episodes (divert, joke, soothe, research talk, other) were analyzed with a 3 $\times$ 2 MANOVA. No significant gender main effects or interactions were found with these analyses.

Comparability of the On-stage Sample with the Remaining Sample

We first compared characteristics of the on-stage sample ($n = 50$ dyads) with those of the remaining sample ($n = 16$ dyads). The distribution of E/E, I/I, and E/I dyads in the current, on-stage sample paralleled that of the remaining dyads ($\chi^2 [2] = 0.07, p = ns$). The gender ratio in the two samples was also comparable with one exception: introverted men were more prevalent in the on-stage sample than the remaining sample (71% versus 20%, respectively, $\chi^2 [1] = 4.00, p < .05$, Cramer's $V = .46$).

The Overall Sample of On-stage Episodes

As shown in Table 2, a total of 126 on-stage episodes emerged across the 50 conversations. Each episode averaged about 50 words in length, about half the length of this short paragraph. Joke was the most prevalent kind of on-stage episode ($f = 57$), followed by divert ($f = 31$), soothe ($f = 17$), research talk ($f = 11$), and other ($f = 10$). Divert, as per its definition, was the shortest maneuver, averaging 16 words in length; joke and research talk were the longest, averaging 83 and 123 words, respectively.

Descriptive Statistics for Dyad Personality

Table 3 presents descriptive statistics for dyad personality with regard to background characteristics and conversational patterns. The three types of dyads did not differ in friendship closeness or length of friendship. Ratings of friendship closeness averaged four on a five-point scale, indicating that most of the friends regarded themselves as quite close.³ The large majority of friendships averaged about one year in length; a few exceptions lasted from 3 years to in one case (a mixed dyad), 14 years. Several outliers in mixed dyads accounted for their relatively high magnitude and variability with regard to friendship length.

As can be seen in Table 3, dyad personality tended to be associated with differences in conversational length ($F[2,47] = 3.07, p < .07$, partial $\eta^2 = .12$). Introverted dyads tended to be less voluble than the other dyads, but there was considerable variability. Dyad personality was not associated with differences in the average length of on-stage episodes, although as was shown in Table 2, some kinds of on-stage episodes (divert) were relatively brief whereas others (joke and research talk) were longer. Across the sample, the average length of an on-stage episode was 50 words. Multiplying by 2.5, the average frequency of such episodes, and dividing by the average length of a conversation, 2030 words, revealed that total on-stage talk comprised on average only 6% of the recorded dialogue (125 words/ 2030 words).

On-stage Patterns and Dyad Personality

Whereas the first on-stage episode emerged 30 words into the conversation for extraverted dyads, latencies for the other dyads were much longer (163 words for mixed dyads, and 209 words for introverted dyads). Because of considerable variability, these differences in latency

³Ratings of friendship length and closeness, and of conversational length were reported previously for the full sample of extraverted and introverted dyads in Thorne, Korobov, and Morgan (2007). Mixed dyads were not included in that study.

were not significantly different ($F[2,47] = 1.66, p = .20$, partial $\eta^2 = .07$). However, extraverted dyads showed the least variability with regard to the latency of their first on-stage episode (Levine's test for equality of variances: $F = 13.18, p < .001$). In short, the first on-stage episode emerged consistently earlier in the conversation for extraverted than for introverted or mixed dyads.

As can be seen in Table 3, the prevalence of *divert* maneuvers also differed significantly by dyad personality. For extraverted dyads, an average of 54% of the on-stage episodes were diverted, compared to 24% and 18% for introverted and mixed dyads, respectively ($F[2,47] = 4.36, p < .05$, partial $\eta^2 = .18$). A Tukey post hoc contrast found that extraverted dyads produced a greater prevalence of divert episodes than did introverted or mixed dyads. A second maneuver, *research talk*, was more prevalent in mixed dyads, 24%, than introverted or mixed dyads, 6% and 3%, respectively; this pattern was marginally statistically significant ($F[2,47] = 2.76, p < .10$, partial $\eta^2 = .10$). As can be seen in the means in Table 3, soothing was more prevalent in mixed than other dyads and joking was more prevalent in introverted than other dyads; however, these patterns were not statistically significant.

Mixed Dyads: Who Initiated and Ended the On-Stage Episodes

The final statistical analysis compared speakers within mixed dyads with regard to who initiated and who terminated the on-stage episode. A paired *t*-test found that the extraverted friend more often ended the on-stage bid, $M = 0.84, SD = 0.34$, than did the introverted friend, $M = 0.16, SD = 0.34$ (paired $t[18] = 4.36, p < .001$, Cohen's $d = 2.00$). The extraverted friend also tended to initiate the on-stage bid, $M = 0.66, SD = 0.41$, more often than the introvert, $M = 0.34, SD = 0.41$, although this comparison was only marginally significant (paired $t[18] = 1.80, p = .09$, Cohen's $d = .80$). Figure 1 shows that the most prevalent pattern was that the extraverted friend usually initiated and ended the on-stage episode; this pattern occurred for an average of 55% of the on-stage episodes for mixed dyads.

Summary of Findings

Two or three on-stage episodes usually emerged per dyad, comprising an average of only 6% of the dialog in each conversation. The first on-stage episode emerged consistently earlier in the conversation for extraverted than other kinds of dyads. Extraverted dyads specialized in diverting on-stage episodes, the quickest kind of on-stage maneuver. Introverted and mixed dyads showed a lower prevalence of divert maneuvers and an overall higher prevalence of other kinds of maneuvers—research talk, soothing, and/or joking. In mixed dyads, the extraverted friend most often initiated and terminated the on-stage episode.

Interview Accounts of On-stage Episodes

The coding system for identifying on-stage maneuvers in the conversations centered on what happened, rather than why it happened. Specifically, we defined a divert maneuver as a brief unilateral statement of awkwardness or discomfort, a soothe maneuver as a bilateral display of comforting, research talk as non-joking discussion about what the study was about, and joking as humorous talk about the recording situation. However, these distinctions do not necessarily reflect the meaning of the episode from the perspective of the participants. Although people are not necessarily fully aware of what motivates their behavior (Wilson, 2002), a large part of motivation is subjective, and it is useful to consider what people say about what they do.

In order to understand the meaning of the on-stage maneuvers from the point of view of the speakers, the research group perused the playback portion of the interview transcripts for comments that referred to particular incidents in the conversation that had been coded as on-

stage episodes. Although the interviews were not designed to focus on on-stage episodes, which we neither expected nor intended to study, the comments were sometimes the result of the interviewer's open-ended inquiry (e.g., "What led you to say that?") and were sometimes volunteered. Sometimes only one partner discussed a particular episode, and sometimes both partners did so. As can be seen in Table 4, about half of the on-stage episodes were referenced in the accounts of either one or both partners. Perhaps because divert episodes were so fleeting, an average of only 23% of these maneuvers were explained in the accounts, whereas the majority of soothe, joke, and research talk episodes were accounted for. The following sections compare extraverted, introverted, and mixed dyads with respect to what was explicitly said about each kind of maneuver.

Accounts of Divert Episodes

For extraverted dyads, accounts of divert episodes reported that acknowledging a feeling of awkwardness was sufficient to move them into a regular conversation. For example, the following exchange launched a conversation between extraverted friends:

Eleanor: OK, so. This is kind of awkward, all right!

Elaine: So, today Elise came by. (proceeds with story)

In her interview, Eleanor said that her reference to feeling awkward named what she was feeling, and that once "we addressed" the awkwardness, the conversation "got a lot more comfortable":

Um, I felt awkward at first, like we weren't having an easy flow in our conversation, um, and I was trying to pretend that we were at ease and at home, and then, we addressed that, and it got a lot more comfortable.

In another extraverted conversation; the initial utterance, "I don't think it'll be hard to distinguish our voices" was explained as an "opener to make me feel comfortable, to get myself comfortable."

Introverted dyads discussed only one divert episode in the interviews. The episode occurred at the beginning of the conversation, when Ivan said "So are we just gonna sit here for ten minutes?" to which his friend responded "Oh, I don't care, anyway, I'm gonna tell you about how much I sweat, right?" and proceeded to tell a story about going to a sauna with his girlfriend. Ivan expressed surprise that his friend "jumped into" the sweating topic, which he felt was inappropriate for the setting; in other words, he did not feel they had embarked on a "normal" conversation.

Mixed dyads also discussed only one divert episode, one in which the extraverted friend defined the microphone as the introvert's problem:

Ida: So that's what we were arguing about yesterday, but...*I'm feeling strange. I'm just noticing the microphone, okay--*

Ella: *I'm not noticing the microphone*, so did you ever figure out why he started that argument?

In her interview, Ida did not mention the above incident; however, in her interview, Ella described herself as "brushing aside" Ida's comment about the microphone in order to "maintain the thread of the conversation."

Accounts of Soothe Episodes

Accounts of soothe episodes by extraverted dyads attributed such exchanges to mutual feelings of awkwardness. For example, one extraverted dyad began the conversation as follows:

Eva: *This is kind of bizarre.*

Elsie: *I know, okay, um, so were you late for class this morning?*

In her interview, Eva said of this exchange “Cuz we’re on tape, it’s so awkward.” Elsie said “We were just looking at each other, like, ‘Okay, what do we do?’”

The accounts of soothe episodes by introverted dyads also attributed the episodes to mutual efforts to manage the awkwardness of the situation. For example, one conversation began with the following exchange:

Ira: *All right, this is weird. Nah, well we’ll be ok.*

Iggy: *Ok, concentrate and focus*

Ira: *Use your Zen...* Well, so what do you at work all day?

Ira said of the above exchange, “I think we were trying to force it at the beginning.” Other accounts by introverted friends also positioned both friends as sharing the problem of trying to manage an awkward situation. One account said “We were just looking at each other like ‘this is really weird,’ and we were laughing.” Another said, “Everything we talked about was kind of like, going down, and what else is there to talk about?”

The soothe episodes that were addressed in the accounts of mixed dyads also confirmed our assumption that such maneuvers defined the situation as a mutual problem. A case in point is the episode with which we introduced the present study, in which the extravert suddenly said she felt “weird,” and the introvert compared the situation to being targeted by the FBI. In the accounts, the introvert said of this episode “This just feels really weird with the microphone,” and the extravert said, “I was wondering about how secure and how private this information would be.” In this and in other accounts of soothing exchanges, both partners, regardless of personality, affirmed each other’s feeling of discomfort.

Accounts of Joke Episodes

Jokes were the most prevalent maneuvers for all kinds of dyads, and were also the most often referenced in the interviews. Half of the extraverted dyads’ accounts of joking episodes attributed the joking to what the friends usually do with each other, such as, “We’re just messing around with each other like we usually do.” The other half attributed the joking to the situation, which made them feel silly (“We felt silly being recorded so we were just joking around.” “We’re just laughing cuz it’s so funny that someone wants to like listen to us talk, so it’s like, we couldn’t control ourselves and then the only way to control is to change the subject.” Notably, none of these accounts explicitly referred to nervousness as the reason for the joking; rather, the joking was attributed either to the nature of their friendship or to the ridiculousness of the situation.

Introverted friends, in contrast, usually attributed their joking episodes to feeling awkward; notably, none of these accounts referred to humor or joking. For example, the following interchange, which we coded as joking because of the counter-normative content of the initial utterance, occurred at the beginning of the conversation:

Ike: Maybe we should just make out for ten minutes.

Isaac: Ok. No one will see us.

Ike: Dude, I bet they’re listening to us right now. See how it’s plugged into the wall?... They’re watching us too.

Isaac: Yeah, I bet they are listening to us, dude.

Ike: Assholes! So eh

Ike said of this exchange, “I think it was just quiet, and I felt like I needed to talk.” In his interview, Isaac said of this exchange, “I felt like we had to relieve some of the awkwardness of the tape recorder.”

Introverts' other accounts of joking were attributed to teasing either the partner or the researchers. For example, one friend said he was teasing his partner about being promiscuous. Another episode, in which the friends proposed singing a song, was attributed to “trying to disrupt the eco-system” by resisting the instruction to engage in a catch-up conversation.

Of the joking episodes discussed by mixed dyads, half of the accounts attributed the joking to mutual nervousness, for which jokes served to reciprocally ease the tension. The other half attributed the joking to “teasing each other like we usually do,” or “just messing around.” For some of the latter accounts, these claims of typical interaction patterns aligned with personality differences between the friends. The most striking example of such personality patterns involved a dyad that spent most of the conversation jostling for who was going to produce a ‘normal’ conversation. The following joking episode emerged at the beginning of their conversation:

Eliza: Is it on? Ok.

Irma: Yeah. Go ahead Eliza, start talking.

Eliza: I don't have to talk. You know that, why are you making me. [laughter] I think this is so funny.

Irma: All right, quick, tell me about your day

Eliza: You know, why should I tell you about my day? You know?

Irma: All right, fine. We'll just sit here in silence for the 10 minutes. So we can show how good friends we are. Okay.

In the playback interview, Irma laughingly said that Eliza was “looking at me suspicious-like and she's just trying to stall talking to me. And I'm just trying to get it going.” The fact that Irma wanted Eliza to start talking first is not mentioned by Irma, but was mentioned by Eliza, who said in her account, “She wanted me to lead, and I was being mean.” During one on-stage episode in their conversation, Eliza walked over to Irma and literally began talking for her, into Irma's microphone. Later in the playback interview, Eliza said that her desire that Irma speak up was a theme in their relationship more generally:

Eliza: Sometimes I have to like, force it out of her. (laughs)

Interviewer: Ah huh.

Eliza: So like, are you mad at me!? I know you're mad at me! (laughs)

Interviewer: Ah huh.

Eliza: (laughing) Kinda like that. And then she would say it. But if I don't say anything, it'll take her like a week for her to finally tell me, “uh you know, I was mad at you”!

Accounts of Research Talk

The only episode of research talk in extraverted conversations was a protracted dialogue about what the study was really about. Only one speaker accounted for this episode; he said “I was looking around for cameras, and I didn't want to mess up the experiment by talking about it, but I wondered if there was anything in particular we were supposed to divulge.”

In contrast, none of the introverted dyads' accounts of their episodes of research talk referenced concern with compromising the study by talking about the research. Instead, introverts produced five straightforward accounts of their interest in figuring out the true purpose of the research. In one such episode, for example, the friends took turns deconstructing the instructions for the conversation and wondering whether they were in the experimental group or the control group. In the interviews, each friend said, "We were trying to figure it out," adding that they felt suspicious about the true purpose of the study.

Similar to introverted dyads, mixed dyads generally explained episodes of research talk as informational. Their accounts cited histories of past involvement in psychology research in which the true purpose of the experiment was disguised. Clearly, there was a precedent for distrusting the stated purposes of the study. For example, the research talk episode cited in Table 1, in which speaker A (an extravert) asked what the study was really about, was explained by speaker B (an introvert) as follows:

It was a valid question. I was also thinking cuz, I've known that I've been thrown 180's before and it's just, what's going on with the experiment and what are they actually testing.

In his account of this episode, the extraverted friend said:

I don't know, I just felt like I always try to look into things, like I always feel like I'm being deceived, for some reason. Like, I've had problems with trust in the past and like I can't really fully trust people. I always need to figure out what's going on because otherwise, yeah, I try to get to the bottom of things.

The above account was the only personal as opposed to situational attribution for research talk.

Discussion

The finding that all conversations, regardless of dyad personality, showed similar frequencies of on-stage episodes suggests that engaging in an audio-recorded conversation was a salient part of the situation for everyone. However, the overall duration of such episodes was brief, comprising only about 6 % of the dialogue in each conversation. Given the brevity of such episodes, the fact that significant differences were found for dyad personality is quite remarkable.

Based on their conversational patterns and their accounts, extraverted dyads confirmed our expectation that they would more readily address the fact that they were being observed and then proceed to off-stage talk (e.g., "Dang, the microphone cord is stuck; now what were you saying?"). Their first on-stage episode emerged consistently earlier in the conversation than for other dyads, and their most prevalent maneuver was to quickly divert on-stage talk. Extraverts' accounts of divert episodes suggested that immediately naming the awkwardness cleared the air for a regular conversation. The abruptness with which extraverted dyads switched the topic from on- to off-stage talk seems to resemble previous findings with regard to frequent topic changes in get-acquainted conversations between extraverted strangers (Thorne, 1987) and 'out of the blue' story telling in the present sample of extraverted friends (Thorne et al., 2007). Such rapid attentional shifts may reflect extraverts' tendency toward distractibility as assessed by cognitive vigilance tasks (Harkins & Geen, 1975; Matthews, 1992). However, the task in the present study was to engage in a recorded conversation to catch up with each other's lives, a task that was more egosyntonic for extraverts. In short, when thrust into the spotlight, extraverted friends used talk to do something that they did well, keep a conversation going.

Notably, none of the extraverted dyads' joking episodes were attributed to their feeling awkward or nervous, but rather to the recording situation making them feel "silly," or to the nature of their friendship, which often entailed joking around. Unlike extraverted dyads, introverted and mixed dyads attributed their joking episodes to nervousness or awkwardness or to teasing each other or the researchers, rather than to the silliness of the situation. This difference appears to reflect a greater tendency for friendships consisting of at least one introvert to use the recording situation as a conversational resource. For example, for introverted and mixed dyads, research talk was a serious endeavor in which the friends tried to figure out the true nature of the study, a concern that an extraverted dyad viewed as inappropriate because talking about the purpose of the research would "mess up the experiment."

Based on past research with strangers we assumed that extraversion-introversion would be contagious (Eaton & Funder, 2003; Thorne, 1987). Contagion may help to explain the finding that quick diverts were the most prevalent for extraverted dyads. However, the notion of contagion is purely behavioral; it precludes the possibility that speakers are attuned to each other's comfort level in certain contexts and that they have a history of familiarity with each other's proclivities for managing particular kinds of predicaments. In particular, contagion did not seem to be operative in mixed dyads. In mixed dyads, instead of introverts behaving in a more extraverted fashion and vice versa, a division of labor emerged in which the extravert tended to initiate and end the on-stage episode. The accounts of some of the mixed dyads indicated that the extraverted partner was assumed to be the expert in moving the conversation along, a role that the extravert did not always relish. In any event, the findings for mixed dyads suggest that extraverted and introverted friends tend to be sensitive to each other's proclivities and develop compensatory routines that may sustain, rather than reduce, their differences. Future research should examine more extensively the repertoires that friends develop to cope with the differential sensitivities that attend their particular combination of personalities. Some of these repertoires may generalize beyond specific settings to reverberate throughout the relationship. For example, some extraverted informants said that they generally served as the mouthpiece for their introverted friends, who were often reluctant to talk.

It is important to note several limitations of the findings. Firstly, the sample size was small, contributing to mostly modest effect sizes. Secondly, because the interview findings emerged from particular cases their value may be more heuristic than predictive. Thirdly, pairing college friends by personality inadvertently resulted in some gender imbalances, specifically, an overabundance of male introvert-introvert friends and of female introvert-extravert friends. The abundance of introverted male as opposed to female friends in the on-stage sample might be random or might reflect the tendency for men's friendships to be less talk-based based than women's friendships, (Johnson & Aries, 1983; Leaper & Friedman, 2007; Radmacher & Azmitia, 2006); particularly in the present context, getting a conversation going may have been more difficult for men, and especially for men who were both introverted. The fact that women predominated in introvert-extravert dyads may also reflect gender differences in friendship practices. Friendships between introverted and extraverted women may entail a division of labor with regard to disclosure, in which the extravert talks and the introvert listens. For men, introvert-extravert friendships may be less compatible because men's friendships tend to be more activity-based than talk-based, and introverted men may prefer different kinds of activities than extraverted men (Nelson, Thorne, & Shapiro, 2009).

Overall, the exquisite dynamics revealed in this study of mundane conversations fills an important gap in personality and coping literature by construing an individual personality problem--introversion in a socially awkward situation--as a shared problem that engendered distinctive patterns of communal coping between friends. A second contribution of the present study is that it reframes what counts as meaningful behavior in the kinds of settings that most

often have been used to study personality transactions: recorded conversations in the laboratory (see also Speer & Hutchby, 2003). Rather than defining the audio recorder as extraneous to the situation, we observed what happened with the recorder. Talk about the recording situation constituted only a small slice of the dialogue in each conversation, but these small episodes were fertile ground to observe how dispositionally similar and opposite friends collaboratively managed a shared problem. By some accounts, these small episodes were symptomatic of more general patterns in their relationship. Future research could examine other shared mundane stressors, such as how introverted and extraverted friends cope with team presentations or navigate unfamiliar places, and how parents with different personalities help their shy child to feel comfortable with strangers (Appelman & Wolf, 2003).

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Fig. 1.
Who initiated the on-stage episode and who ended it in mixed (E/I) dyads.

Table 1
Kinds of On-Stage Episodes

Category	Example
Divert	A: <i>OK, so, this is kind of awkward, all right.</i> B: So today Elise came by.
Soothe	A: <i>She's [the research assistant] going to hear this and like laugh.</i> B: <i>Probably everyone does this, especially early in the morning.</i> A: <i>I know.</i> B: <i>So early.</i> A: <i>God, I can't believe I'm awake. (laugh)</i> B: <i>I don't even wake up for class at this time.</i> A: Didn't you sleep through your class yesterday?
Joke	A: <i>OK, we gotta say something. Hey, it's nice to meet you Betty!</i> B: <i>I'm an alcoholic. (both laugh)</i> A: <i>Are you supposed to say your name when you're saying you 're an alcoholic? Hmm. Yeah, you're supposed to be totally anonymous</i> B: <i>uh, um, uh, oh yes, anonymous (both laugh)</i> A: So anyways, I'm sorry my phone went out on you so many times last night.
Research Talk	A: <i>What do you think this shit's all about?</i> B: <i>I really don't know, because from what I've remembered or experienced in the past it's never what you first think it's gonna be.</i> A: <i>Maybe it's to uh see if two, two guys can talk, carry on a conversation for ten minutes.</i> B: I remember one experiment- actually the experiment over the summer I did was really fun. I learned how to read lips.

Note: A is one speaker; B is the other. Material in italics marks each on-stage episode, and the first italicized utterance is an on-stage bid. Non-italicized text signifies termination of the on-stage episode.

Table 2
Descriptive Statistics for the Total Sample of On-stage Episodes (f =126)

Variable	Word length	
	<i>M</i>	(<i>SD</i>)
Episode length	49.26	(46.66)
Kind of episode		
Divert (<i>f</i> = 30)	14.93	(10.94)
Soothe (<i>f</i> = 17)	38.65	(30.37)
Joke (<i>f</i> = 57)	82.72	(60.64)
Research talk (<i>f</i> = 12)	112.85	(88.37)
Other (<i>f</i> = 10)	32.78	(27.09)

Descriptive Statistics by Dyad Personality

	Dyad Personality				ANOVA Results			
	E/E		I/I		E/I			
	M	(SD)	M	(SD)	M	(SD)	F (2,47)	Partial η^2
Background information								
Friendship length (months)	16.41	(16.22)	18.32	(16.56)	30.29	(41.58)	2.98 [†]	.12
Friendship closeness (1-5)	4.03	(0.84)	3.89	(0.94)	4.42	(0.63)	0.61	.03
Conversation length (words)	2113.59	(368.86)	1843.57	(235.33)	2092.00	(347.15)	3.07 [†]	.12
On-stage episode length (words)	46.54	(50.27)	46.85	(25.20)	53.47	(51.22)	0.01	.00
Latency of first episode (words)	30.29	(80.54)	209.57	(395.88)	162.63	(312.59)	1.66	.07
On-stage episode frequency	2.59	(1.81)	2.93	(2.37)	2.16	(1.89)	0.24	.01
Kind of on-stage episode (% per dyad)								
Divert	.54 ^b	(.44)	.24 ^a	(.31)	.18 ^a	(.32)	4.36 [*]	.17
Soothe	.10	(.18)	.18	(.32)	.31	(.41)	1.84	.08
Joke	.28	(.35)	.42	(.36)	.25	(.36)	0.91	.04
Research Talk	.03	(.12)	.06	(.16)	.24	(.42)	2.76 [†]	.10
Other	.05	(.11)	.10	(.20)	.03	(.11)	1.11	.02

 $p < .10;$

* $p < .05$, two-tailed. Cells with different superscripts are significantly different. Standard deviations are in parentheses.

Table 4
Proportion of Each Kind of On-stage Episode Explicitly Discussed in the Interviews, by Dyad Personality

Episode	Dyad Personality									
	Extraverted			Introverted			Mixed			Total
	<i>f c</i>	<i>f i</i>	%	<i>f c</i>	<i>f i</i>	%	<i>f c</i>	<i>f i</i>	%	
Divert	15	5	33	9	1	11	6	1	17	7
Soothe	5	3	60	4	3	75	8	5	63	11
Joke	20	14	70	17	11	65	20	8	40	33
Research talk	1	1	100	5	5	100	6	4	67	10
Total	41	23	56	35	20	57	40	18	45	61

Note: *f c* is the overall frequency of each kind of on-stage maneuver in the conversations. *f i* is the overall frequency of such maneuvers that were explicitly discussed in the interviews. The latter index does not double-count each partner; that is, a divert episode that was discussed in both interviews was counted as 1, as was a divert episode that was discussed by only one partner. For example, 15 divert episodes were produced by extraverted dyads, and in the interviews, 5 of these episodes were discussed by one or both partners.