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TOWARD A SOCIOLOGY OF SOCIAL DISTANCING: SOCIAL PROCESSES, BELIEFS, AND COMPLIANCE WITH PUBLIC HEALTH RECOMMENDATIONS

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ABSTRACT

Researchers have often centered on certain beliefs (e.g., assessment of personal risk) in studies of compliance with health-promoting behaviors. The current study adds to the cognitive focus of Health Belief Models by exploring the role of social constraints, experiences, and network influences on compliance with social distancing recommendations designed to limit the spread of COVID-19. Drawing on the symbolic interaction and life course traditions, results of a mixed-method longitudinal study showed that lower educational attainment and inability to work from home were associated with level of social distancing. Nevertheless, more localized "lifestyle" factors (partying, lack of commitment to a long-term relationship) and the compliance behaviors of significant others were significantly linked to respondents' own social distancing reports. Consistent with prior work, conservative political views and perceptions of effectiveness of social distancing were significant correlates; however, the significance of an "altruistic" motive indicates that some beliefs may be specific to particular health contexts. In-depth interviews further illuminated social dimensions of compliance, interrelationships between social and cognitive processes, and the presence of a kind of "patchwork" of beliefs that were often inconsistent or inaccurate. Results underscore the utility of a sociological lens on social distancing, an individual choice with consequential societal implications.

Toward a Sociology of Social Distancing: Social Processes, Beliefs, and Compliance with Public Health Recommendations

Previous studies of compliance with public health recommendations in the wake of disease outbreaks have examined self-quarantine when a family member has become ill (Brooks et al., 2020), the practice of good hygiene habits such as frequent hand washing (Pittet, 2000), and decisions to be vaccinated (Changolkar et al., 2020). However, examinations of compliance with large-scale social distancing recommendations designed to mitigate disease spread are limited. In light of the current coronavirus pandemic, and the potential for future outbreaks that require social distancing, it is important to explore sources of variability in accommodating these shifts in lifestyle and behavior. Most studies of compliance with social distancing are based on convenience samples (e.g., Brauer et al., 2020) or hypothetical scenarios gauging perceived likelihood of compliance in the event such procedures were to be put in place (e.g., Bass et al., 2010). More fundamentally, conceptual treatments and associated measurement strategies designed to assess predictors of variability in compliance with these public health recommendations tend to be individualistic, often following basic emphases of the Health Belief Model (HBM) (see Skinner et al., 2015). However, a number of recent studies have broadened the scope to explore the effect of political leanings or narrowed it to focus on individual traits such as low self-control (Graham et al., 2020).

While these are important factors associated with compliance, we draw on a symbolic interactionist (SI) perspective to explore the social nature and ramifications of the process of complying with recommendations that necessarily involve changes in social patterns (Mead, 1934). We argue that the individualistic emphasis of most prior studies, or even the focus on political orientation, will not adequately capture either the complex dynamics involved in acquiring beliefs that serve as guides to action or the full set of contingencies that complicate attitude-behavior connections. This includes constraints and possibilities linked to socioeconomic position, along with more localized dynamics tied to one's lifestyle and involvement within intimate social networks. The SI tradition carves out space for the individual, but, following Mead (1934), stresses that: a) the development of meanings—including health

beliefs—and associated behaviors, are processes deeply influenced by the social, and b) views are not preordained or fixed, but continually evolving in response to the realities of new situations. The recommendation to social distance offers an excellent example of Mead's focus on behaviors that develop in connection with problematic situations (Mead, 1934). Mead noted that in contrast to the relatively routine and relatively "mindless" qualities of habitual acts, thoughts and emotions arise when the individual cannot proceed ahead seamlessly based on past repertoires. In such situations, one's social location and interactions within intimate relationships are integral to understanding the process of crafting new meanings and in turn new lines of action. These complex dynamics also open up possibilities for agency and creativity, given the uniquely human capacity for reflection, and ability to put it all together and respond in novel ways (Matsueda, 2006). Yet while agency and creativity are generally framed as positives, the actor's agentic moves need not head in a pro-social or health-promoting direction.

The current study builds on a mixed-method longitudinal investigation of the lives and social experiences of a large, heterogeneous group of respondents interviewed first as adolescents, and five additional times across the transition to adulthood. A new wave of structured and in-depth interviews recently completed focused specifically on respondents' experiences with and responses to COVID-19. The survey assessed attitudes and beliefs related to the pandemic, and the value of social distancing during this period, but also obtained reports about behaviors and orientations of family, peers, and partners, and reports about respondents' own levels of compliance. Two key advantages of the study are: a) the longitudinal design includes detailed data on economic well-being, social connections, and life experiences collected prior to the pandemic, and b) in addition to the structured survey of 814 respondents who vary in levels of SES and other demographic characteristics, in-depth qualitative interviews were completed with a subset (n=54) of TARS respondents selected to reflect variations in these and other relevant life circumstances. The longitudinal design permits us to examine how general and COVID-specific social and lifestyle factors and individual beliefs are related to reported levels of compliance. The qualitative data add to our understanding of the underlying mechanisms linking economic marginality, social influence processes, and variability in compliance, and provide a window on the processual aspects

of navigating this unique and consequential period. In addition, the in-depth interviews foreground some limitations of the "acted upon" implications of traditional theories and multivariate models. Directly related to this more active conceptualization of human behavior, these data highlight the need to move beyond conceptualizations of individuals as either compliant or non-compliant. Recognizing the relatively sudden emergence of a pandemic and associated public health recommendations that promote basic transformations in how people live, we suggest that individuals often piece together a patchwork of beliefs that are not always well founded or internally consistent, but that serve as guides to action nevertheless.

RESEARCH ON HEALTH BELIEFS AND OTHER INDIVIDUAL DIFFERENCES

The HBM has been widely used as a framework for understanding variability in compliance with many different health-promoting guidelines, including the process of making significant behavioral changes (Skinner et al., 2015). Important aspects of the HBM include a focus on perceptions of susceptibility or risk as well as beliefs about the perceived likelihood that the intervention or health-promoting behavior will have a positive effect. Clark et al. (2020), relying on a large international sample, found that believing the precautions were likely to be effective and "prioritizing health" were related to compliance with social distancing recommendations in light of COVID-19. In this study, however, the investigators did not find that factors such as perceived vulnerability, severity of the problem, or trust in government were related to compliance. Similarly, Harper et al. (2020), relying on a predominantly British sample, did not find an effect of political ideology, and in their investigation, fear of COVID-19 was the only significant predictor of variability in compliance. Further complicating the portrait, and more consistent with U.S. media treatments, Allcott et al. (2020) used smart phone location data to examine patterns of social distancing, and found that areas with a greater concentration of Republicans were less likely to social distance. Drawing on survey data, the authors also found a difference based on party affiliation, and observed variability in compliance based on beliefs about risk and perceived severity of the pandemic. Generally consistent with the Allcott et al. location data findings, Becher et al. (2020)

showed that country-level differences in deaths due to COVID and strictness of "lockdown measures" were related to COVID, and at the individual level ideology was predictive of compliance only in the U.S. and New Zealand. Recently, Graham et al. (2020) found that positive attitudes toward then President Trump were significantly associated with defiance of the guidelines. In summary, various aspects of the HBM have been supported empirically, but across studies, different dimensions have been found to be significant predictors of compliance with social distancing recommendations. It also appears that political orientation is a more reliable predictor in the U.S. than in other countries where governments have imposed more uniform and stricter mandates.

Another line of research has considered individual traits or proclivities and their association with social distancing compliance. For example, Wolff et al. (2020), relying on European data, found that being prone to boredom and low self-control predicted non-compliance. The Graham et al. (2020) study in the U.S. also documented a strong association with low self-control. Xie et al. (2020), relying on a U.S. sample, also recently observed that those who scored lower on a short-term memory task were less likely to be compliant. Our view is that while such studies add to knowledge of individual-level sources of variability, they fail to fully contextualize this phenomenon by considering social precursors, contingencies and costs associated with social distancing.

RESEARCH ON SOCIAL FACTORS

Socioeconomic status

Consistent with an increased interest in the "social determinants of health" (Braveman et al., 2011), researchers and media treatments have documented numerous ways—ranging from variability in pre-existing conditions to access to high quality health care—in which poverty increases risk of negative outcomes given exposure to COVID-19 (Finch & Finch, 2020; Tipirneni, 2021). However, less is known about economic and social influences on levels of adherence to the social distancing recommendations themselves. Several of the above studies included indices of socioeconomic status (e.g., level of educational attainment) but limitations are that: a) most studies included these potential sources of

variation primarily as controls, and b) online recruitment methods often draw disproportionately from more advantaged respondents. For example, in the Brauer et al. (2020) study, 80% of the sample had an undergraduate or advanced degree. Xie (2020) and Wolff et al. also noted that the underrepresentation of disadvantaged subjects were limitations of their investigations.

Hoenig and Wenz (2020) recently indicated that individuals with low levels of educational attainment were somewhat underrepresented in their study, but the sample provided a broader range relative to some of the other recent investigations. The authors focused on the effects of education on variability in social distancing within a sample of German respondents, and whether less well-educated individuals would social distance less due to structural sources of inequality (i.e., less likely to have jobs that enabled them to work from home), or differences not directly linked to such constraints. Results revealed that levels of compliance across educational categories varied in the expected direction, but differences were not dramatic. In addition, the authors found that structural factors such as the nature of their employment were important factors underlying the observed differences. In another study focused on income differentials, Weill et al. (2020) examined income at the county level and found differences in social mobility based on cell phone tracking data pre-and during the pandemic. Results of their analyses indicated that the wealthy areas went from the most to the least mobile, while the disadvantaged counties went from least to most mobile during the pandemic.

These studies provide a preliminary basis for expecting differences in social distancing based on socioeconomic status. SI theories were initially criticized for the lack of attention to macro-level influences (Stryker, 1987). However, over time scholars working in this tradition have emphasized the importance of forging links between broader bases of inequality and the local circumstances that are the more traditional purview of symbolic interaction theory and research (Fiske & Molm, 2010; Schwalbe, 2020). This emphasis fits well with our study objectives. We first examine associations between socioeconomic status and an index of social distancing (e.g., staying at home, not visiting with family, not socializing with friends) within the context of a stratified, random sample of adults that includes sufficient variability in SES levels, and also assess whether some of the effects of SES are due to an association

with social factors and ultimately beliefs about a) personal vulnerability and b) the efficacy of social distancing recommendations to limit the spread of the disease. Due to the unique features of this form of disease (as a contrast to, for example, health measures related to diabetes), we also determine whether more altruistic motives (desire to protect family members) plays a part in understanding variability, in general, and as it relates to observed SES differences.

Unsettled Lifestyles

The above analyses will add to basic knowledge about variability in compliance linked to aspects of the individual's socioeconomic position, and beliefs that support compliance. Yet as suggested by the symbolic interactionist lens and the broader life course tradition, other local life circumstances require additional attention as well. Individuals in their thirties are expected to "settle down," not only from an economic standpoint, but in their personal lives (Panagakis, 2015). However, basic shifts in the average age at marriage and the uncertain economic circumstances themselves have created for many an extended period of "emerging" adulthood (Settersten et al., 2015). Features of an "unsettled lifestyle" may include a pattern of less-than-full commitment to a single romantic partner, continued "partying" and substance use. This unsettled pattern may be linked to socioeconomic position but is conceptually distinct. Yet such actions on the part of less affluent individuals may result in a higher probability of arrest and potentially incarceration—experiences that further compromise economic and social circumstances, and may be implicated in compliance with the social distancing guidelines. In the current study, we investigate the degree to which various unsettled lifestyle factors are associated with variability in compliance with the guidelines, after taking into account respondents' socioeconomic status and including the nature of their beliefs about the value of social distancing.

Social Relationships and Social Distancing

Numerous studies of health and longevity have shown the positive impact of intimate ties and social support (Berkman & Glass, 2000). Yet when focusing on the phenomenon of social distancing, strong

attachments to family and friends may prove more challenging to the process of complying fully with these public health recommendations. The age group we focus on in this study is of particular interest from a social network standpoint, as in many instances they are "hubs" of social activity (in social network terms they have high degree centrality) (Zhang, 2010). A majority of individuals in their 30's have children, but as recent analyses have shown, often continue to interact on a frequent basis with friends (Giordano et al., 2020; U.S. Census Bureau, 2019). Further, strong ties to parents and other family members may be associated with giving or receiving assistance (e.g., going to the store for parents or relying on them for child care). These elements of reciprocity across generations may prove challenging to efforts to social distance, as may children's interactions outside the immediate family.

A provisional hypothesis is thus that even though strong ties and support are generally viewed as health promoting, such ties may make it less rather than more likely to comply fully with the requirements posed by social distancing guidelines. The emphases of social learning theories add a further—and we argue important—layer of complication. Studies of social learning and influence focus less on the strength of bonds of attachment, and more on the attitudes and behaviors of significant others (Sutherland, 1947). This accords well with the symbolic interactionist notion that meanings are socially constructed. As Mead (1934) argued, thoughts form the basis of action, as adherents of health belief approaches posit. Yet recognizing the cognitive underpinnings of behavior reveals little about the social influences that are integral to the process of acquiring such beliefs, particularly where the referent is novel, problematic situations. Thus, a second hypothesis related to significant others is that the social distancing patterns and views of close ties (parents, peers, partners) will be associated positively with individuals' own reports of their levels of compliance.

Aligned vs. "Mismatched" Meanings

It is intuitive to expect that significant others' attitudes about social distancing and compliance behaviors will have effects, both as direct models, but also in reinforcing the beliefs that support the individual's own repertoire of beliefs and actions. Yet recognizing that the pandemic and requirements for

social distancing represent completely new terrain, it is possible that some of the health beliefs and behavior patterns that have emerged are not entirely consistent with one another. In addition, it is likely that meanings change over time with additional social exposure, and as understandings evolve to meet the exigencies of new situations. These realities are not well captured by the more generic aspects of the health beliefs model, as applied to other long-standing health and behavior change contexts. Thus, for example, it is possible that individuals view the pandemic as quite serious, but come to believe (perhaps erroneously) that some social connections do not represent a serious breach of the recommendations. Another example of mismatched meanings (as suggested by our discussion of concomitants of socioeconomic disadvantage above) is that individuals may well recognize the risks, but given the presence of various constraints, believe that maintaining a consistent pattern of compliance is simply not possible. And, while it is not feasible to trace all social influences on the meaning construction process, theoretically, ongoing communication with significant others may influence this patchwork of beliefs. For example, a grandmother may attempt to assure her daughter that caring for a grandchild is not likely to be a major source of risk.

Scholars have long noted that when individuals move away from what is generally considered the prosocial or expected pattern, this often requires more in the way of explanation, and may include accounts about the conditions under which the (behavioral) departure makes sense or is understandable in light of these circumstances (Orbuch, 1997). For example, items tapping acceptance of spouse/partner abuse typically receive low rates of endorsement (Simon et al., 2001). Yet intimate partner violence remains a very significant social problem. Thus, research based on in-depth interviews has identified various conditions (e.g., being hit by the partner, perceived infidelity) that the individual believes make this action more understandable (at least to the individual, and it is hoped, the receiver of the communication) (Anderson & Umbersen, 2001). Although some of these conditional understandings may be after the fact excuses and justifications (Anderson & Umberson, 2001), our view is that such beliefs may guide action in the present and are available as conceptual frames should new problematic situations arise in the future (Mead, 1934).

This perspective is consistent with Winchester and Green's (2019) recent argument about the need to abandon the either/or nature of these conceptualizations. The authors' analyses illustrate how the two dynamics may be sequenced and mutually influential. Their work supports the view that narrated representations may reflect not just post-hoc justifications or excuses, as these may also have clarifying and motivational significance. In addition, the ever-emergent nature of cognitive processes and indeed, of lines of action, particularly in this context, suggests the possibility for changes in meaning(s) and a lack of the kind of internal consistency that might be more characteristic of long-entrenched patterns. In addition, as scholars exploring the phenomenon of human agency have underscored, the individual is more than a bundle of received (from others) definitions, as one's previous life circumstances and current identity statuses represent a unique filter (Giordano et al., 2002). Thus, integral to an assessment of meanings related to social distancing, we highlight some of these areas of inconsistency (e.g., believing that social distancing is important, but nevertheless failing to wear a mask). In-depth qualitative interviews are a particularly useful adjunct to the quantitative analyses, as these: a) further illuminate findings relating to SES effects, social network influences, and these areas of "mismatch," b) provide a window on the social and processual aspects of these experiences, and c) the highlight the play of agency as individuals understand and frame for others the nature of their responses to this serious public health crisis.

CURRENT STUDY

We draw on responses from waves 6 and 7 of TARS' structured surveys to examine the association between b) *socioeconomic status* (education, income) and *work situation* (ability to work from home), b) *lifestyle circumstances* (specifically our notion of settled or unsettled—indexed by questions about "partying," problem substance use, lack of commitment to a specific partner and criminal justice contacts (adult arrest(s)), c) features of respondents' *social networks*, and d) *beliefs* (political, those that tie into aspects of the HBM), and level of compliance with social distancing guidelines. Specific characteristics of social networks assessed are derived from attachment and social learning theories. Measures of closeness to parents and romantic partner/spouse (w6) provide indices of attachment to significant others. Drawing

from basic tenets of social learning/influence theories we assess parents' and friends' levels of compliance with the social distancing recommendations, and partner's level of pressure to comply with the guidelines. Some questions, such as the level of attachment to parents and reports of "partying" rely on the wave 6 survey administered immediately prior to the start of the pandemic to avoid confounding responses with consequences of the pandemic itself. Other pandemic-specific questions are necessarily asked at wave 7 (e.g., extent to which family members comply with the social distancing recommendations). Within the realm of beliefs that are considered relevant to understanding compliance, we include a scale indexing the conservative-liberal stance of the respondent. In addition, we incorporate several dimensions of the HBM, including the perception that social distancing is likely to be effective, feelings of personal vulnerability or risk, and a more altruistic consideration related to whether social distancing helps to prevent other members of the family from contracting the disease. Other sociodemographic factors introduced as controls include age, gender, race/ethnicity (white, Black, Hispanic), and the individual's status as a parent. Consistent with prior research, we expect women to report higher levels of compliance, but in supplemental models also explore the influence of gender on the basic patterns, by estimating models that include the interaction of gender and key focal variables. Another supplemental analysis focuses specifically on mask wearing.

We draw on the lengthy interviews elicited from a subset of the respondents (n=54), as these provide additional insight about: a) the mechanisms underlying observed associations, b) the processual aspects of adherence to the guidelines, even across the relatively short period encompassed by the pandemic, c) specific inconsistencies in the beliefs and behavior patterns respondents describe (i.e., our notion of a "patchwork of beliefs"), d) some limitations of the passive vessel implications of social influence models, and e) how consequences of social distancing (stress, loneliness, substance use) may influence behavior in ways that are inconsistent with a respondent's initial stance toward social distancing.

DATA AND METHODS

Sample

TARS is a study of the lives of a diverse sample of women and men (n=1,321) interviewed first as adolescents and six additional times as they transitioned to adulthood (2001-2020). While the sample, devised by NORC, was initially based on school rosters, school attendance was never a requirement for inclusion. Thus, the sample includes young adult women and men who represent a broad range of socioeconomic circumstances. The stratified, random sampling procedure also oversampled Black (25%) and Hispanic (11%) respondents. The population-based sample is regional; nevertheless, respondents are demographically similar to 30-34-year-olds at the national level (e.g., TARS consists of 38% racial/ethnic minorities compared to 35% in the U.S. and 36% college graduates versus 40% in the U.S).

The seventh wave of data collection focused on the experience of the pandemic and compliance with social distancing guidelines. This included a survey of the total sample and in-depth interviews with a subset of TARS respondents, now in their thirties (May-November 2020). While older adults face greater overall risk of health complications and mortality with respect to COVID-19, as noted above, younger adults (often with children and older parents) are nevertheless of importance as they can be considered "hubs" within networks of affiliation. Further, recent evidence indicates that individuals aged 20-49 account for approximately three-quarters of COVID-19 infections (Monod et al., 2021). Thus, actions younger adults take influence their own health and potentially limit or exacerbate network and population risk.

The wave 7 protocols focused on those respondents who had participated in wave 6, as this provided us with responses elicited close in time to the start of the pandemic, but prior to it. We eventually located and surveyed 82.2 % of the wave 6 respondents. Respondents completed online surveys, although a small number who did not have internet access or had reading difficulties were interviewed by phone. We also conducted in-depth (phone) interviews with a subset of the TARS respondents (n=54). These transcribed interviews ranged in length from 15 to 66 pages, with an average of 33 pages. We selected these respondents for interviews based on two conceptual areas. First, we varied the level of attachment/embeddedness in networks, drawing on wave 6 questions about attachment to parents and involvement with peers. These domains are particularly important as they generally represent social ties

outside of the immediate "bubble." We expected and found adequate variability in levels of attachment to partners relying on these criteria. A second subset was selected based on indications of an unsettled lifestyle. We chose respondents whose backgrounds as indicated by wave 6 reflected prior jail/prison experience and/or problem substance use. We chose these criteria to avoid interviewing individuals who might, for example, not report involvement in a committed relationship, but who were financially secure and settled in other ways. Our prior research suggests that criminal justice contact provides entrée to individuals whose lives can be considered unsettled in multiple respects.

For the quantitative analyses, we focused on reports of compliance with social distancing guidelines, and thus respondents who did not participate in the wave 7 interviews were excluded (n=506). We also excluded a respondent who was missing information on the social distancing outcome measure (n=1). Given our interest in the roles of different types of relationships, we excluded respondents who did not report on a current/most recent romantic relationship during the wave 6 survey (n=26), as well as those who were not currently in a relationship at wave 7 (n=166). Finally, we excluded respondents who reported their race as "other" due to small cell sizes (n=18). Our final analytic sample consisted of 604 participants, including 365 and 239 young women and men, respectively.

In-depth Interviews

The in-depth interviews were conducted by phone due to the pandemic. This sample was racially/ethnically diverse and consists of 27 women and 27 men. A straightforward guide of four broad questions elicited views about social distancing, where relationships with others fit into considerations/behavioral choices, changes over time, and effects on emotional and behavioral well-being. Complete details about sample selection procedures, the interview protocol, and approach to analysis of the qualitative data are included in online Appendix A.

MEASURES

We include all items comprising the structured scales and indices in online Appendix B, as well as a supplemental analysis focused specifically on mask wearing.

Dependent Variable

Social distancing. This wave 7 index is based on responses to 5 items assessing respondents' frequency of compliance with stated guidelines, (e.g., increasing the physical space between "you and other people," "staying home as much as possible"). We averaged responses across the items to create a 5-item scale, ranging from 1 "never" to 5 "as much as possible" (alpha=.73). Based on the content of the in-depth interviews, mask wearing appeared to involve somewhat different considerations. However, we estimated similar models focusing on "wearing a face covering" as the dependent variable, and results are generally similar to those presented below (see online Appendix B).

Independent Variables

Socioeconomic status/work context. We assessed education, income, and the nature of respondents' work environments. *Education* (wave 6) was measured based on the respondents' highest level of education: high school (or less), some college, and college or more (contrast category). *Income* (wave 6) was based on a single item asking respondents: "In 2016, how much income did you receive from earnings—that is, wages or salaries, including tips, bonuses, and overtime pay, and income from self-employment?" We used a logged version of income in the multivariate analyses to correct for skewness. We relied on a single item to assess *inability to work from home* (wave 7) based on respondents' reports of how often they "went to a workplace that requires them to come into contact with others" (responses ranged from 1 "never" to 5 "as much as possible").

Unsettled lifestyle. Lack of relationship commitment (wave 6) was taken as the mean of two items: "I may not want to be with X a few years from now" and "I feel uncertain about our prospects to make this relationship work for a lifetime" (responses ranged from 1 "strongly disagree" to 5 "strongly agree) (alpha=.82). Frequency of *partying* (wave 6) during the last year was measured with three items: 1) go to

a bar, pub, or nightclub, 2) party with friends, and 3) party with their spouse or partner. We created an average based on responses ranging from 1 "never" to 9 "more than once a day" (alpha=.86). Relying on a six-item scale, we also assessed respondents' *problem drug/alcohol use* (wave 6), based on questions tapping the extent of their alcohol- and drug-related problems in the past year. Responses ranged from 1 "never" to 8 "almost daily" (alpha=.62). A single indicator was used to capture *adult arrest* (wave 6) based on respondents' self-reports of arrest since they turned 18 (1=yes).

Characteristics of social ties. *Parental attachment* (wave 6) was measured using the following single item: "I feel close to my parents" (responses ranged from 1 "strongly disagree" to 5 "strongly agree"). We measured *attachment to partner* (wave 6) using a single item asking respondents "How much do you love X?" (responses ranged from 1 "not at all" to 5 "very much"). *Friend social distancing* was taken from the following wave 7 item: "How many of your friends and acquaintances practiced social distancing" (responses ranged from 1 "none" to 5 "all"). A similar item was used to assess *family social distancing* (wave 7). We measured partner orientation with an item referencing the *partner's pressure to comply* using the following single wave 7 item: "How much pressure have you felt from your romantic partner to follow the guidelines" (responses ranged from 1 "no pressure" to 4 "a great deal of pressure"). A limitation of this item is the somewhat different wording relative to the family and peer indices.

Beliefs. *Political beliefs (conservative)* were taken from two items assessing respondents' views on (limited) government and the role of politicians and the media in exaggerating COVID-19 risk. Based on prior research relying on the HBM, we included multiple indicators of health beliefs, including perceptions regarding the *effectiveness of social distancing* ("How effective do you think social distancing is for reducing the spread of COVID-19?" (responses ranged from 1 "not at all effective" to 5 "very effective"). We also assessed *personal (high) risk* ("I am at high risk of being infected") and belief in risks of similar-aged peers ("Most people my age will not have serious health consequences from COVID-19"), *perceives age group at low risk*. An *altruistic motivation* was based on respondents' level of agreement with the following: "My social distancing behavior contributes to the prevention of other

members of my family from becoming infected." As a potential scale, the health belief items had poor

internal consistency when grouped (alpha=.47), suggesting that they do represent somewhat distinct

constructs.

Sociodemographic controls. We included a series of sociodemographic indicators: *gender* (female=1)

and *age*, measured in years using a continuous variable reported from respondents' age at wave 7, as well

as three dummy variables to measure *race/ethnicity* including non-Hispanic white (contrast category),

non-Hispanic Black, and Hispanic. To control for *parent* status (wave 7), we included a dichotomous

variable indicating whether the respondent has any biological children (1=yes).

RESULTS

Table 1 presents the mean values and distributions of the variables included in the analyses. The mean

value on the social distancing scale suggests that most individuals believe that they are in compliance

with at least some of the recommendations, and the frequency reported averages an "often" response.

Table 2 presents results of analyses focused on variability in levels of compliance with the social

distancing recommendations. The first column presents zero order results. As shown in Table 2, higher

education is positively linked to social distancing compliance. When compared with the contrast group

(college graduate), both those with some college and a high school degree or less score lower on this

measure of social distancing compliance. In contrast, total household income as assessed immediately

prior to the pandemic is not significantly associated with social distancing. Respondents who indicated

that they had the type of job prior to the pandemic that could not be done at home scored lower on the

compliance index. The next set of factors indexed the nature of the respondents' lifestyles before the

pandemic (our notion of settled/unsettled). Relationship commitment was not associated with compliance

at the zero-order. Higher scores on the partying scale were linked to lower levels of social distancing. In

contrast, problem substance use was not significantly tied to compliance. This finding likely reflects that

behaviors involving socializing with others (including partying and going out to bars) are more

consequential relative to problems related to use. At the zero order, adult arrest was significant and negatively associated with social distancing compliance.

Turning to the character of their social ties, the indices of attachment (closeness) to parents and partners are not significantly related to level of compliance with the social distancing guidelines. In contrast, both the report of friends' and family members' levels of compliance are significantly related to the respondent's own reported levels of social distancing. Partner pressure to comply is also significant.

Consistent with prior work, reports of a more conservative political orientation were associated with lower levels of compliance. Turning to beliefs that fit within a health belief model framework, the zero order results show that believing that social distancing is likely to make a difference (effectiveness) with respect to the spread of COVID was significantly related to reported compliance with these guidelines. Of interest, however, the measure related to personal risk was not significantly related to compliance. Perception that their age group is at low risk, was however, at the zero order, associated with social distancing. A level of altruism (reflecting the degree to which compliance was linked to helping family stay safe) was associated with higher levels of compliance. With respect to other sociodemographic characteristics, results indicate no significant differences according to race/ethnicity, and women are significantly more likely to adhere to the guidelines. Older respondents report lower levels of compliance, (as a reminder our sample is limited to a relatively narrow age range), while parenthood status was not significantly associated with social distancing compliance.

The second model includes all of the focal socioeconomic, unsettled lifestyle, and social factors, along with additional controls. In this model educational attainment is no longer associated with social distancing. Supplemental analyses indicate that the effect of education is attenuated by introduction of the social ties factors. This indicates that education is important in this context as it is related to a greater likelihood of having family, friends, and a partner whose orientations favor compliance. Inability to work from home remains a significant factor associated with lower levels of compliance. With respect to indicators of an unsettled lifestyle, lack of relationship commitment becomes significant and is associated with lower levels of compliance. Additional analyses reveal that it is the inclusion of the social ties

indicators that shifts the association between commitment and compliance. Friends' and family members' compliance and partner's pressure to comply are associated with higher levels of social distancing. In this model Black and Hispanic respondents indicate higher levels of compliance than their white counterparts. Women report greater compliance, and age remains significant in this model--older age is associated with less compliance (recall that all of the respondents are in their thirties).

The final model introduces the two categories of beliefs—political orientation and those tapping "health beliefs." In this model, conservative beliefs are associated with lower levels of compliance. Two of the health beliefs are significant predictors, taking into account all factors assessed. Perceived effectiveness of social distancing and the altruistic consideration (helps to protect family) remain significant factors associated with variability in compliance. In this full model, neither the assessment of personal risk nor believing that the age group is at risk are associated with compliance. With respect to the other factors, working at home retains significance, and the settled/unsettled factors assessed remain unchanged (lack of relationship commitment and partying are both significant and are associated with less compliance). In terms of social ties, only friends' social distancing is significant, and supplemental analyses reveal that family and partner indicators are explained by the introduction of the belief measures. Gender and age remain associated with social distancing and there are no longer race and ethnic distinctions with the inclusion of the belief measures.

We estimated supplemental models that included the interaction of gender and the focal variables included in Table 2. In most of these analyses, the interactions were not significant, indicating a similar effect of the social and belief factors for male and female respondents. In the case of friends' social distancing, while this factor was significantly related to social distancing compliance for both women and men, friends' compliance had a stronger impact on men's reports about their behavior. In another supplemental analysis, we examined mask wearing as a dependent variable, drawing on the same roster of focal variables and controls. Most of the factors related to mask wearing were similar to those that were significant in the social distancing models. However, the unsettled lifestyle factors were not significant in the full model. Further, it is potentially important to note that in this model, minority status (Black) was

associated with higher levels of compliance with the mask-wearing recommendation (see Table 1, Appendix B).

RESPONDENTS' PERSPECTIVES ON SOCIAL DISTANCING

SES As a Pre-Existing Condition

Analyses of the in-depth interviews conducted with a subset of the TARS respondents highlight that many factors directly linked to socioeconomic position dramatically shape respondents' lives prior to the pandemic, and once the realities associated with COVID-19 began to unfold. Recall that we had selected respondents for these in-depth interviews to achieve variability in respondents' levels of attachment or "embeddedness" in their social networks and based on responses indicative of an unsettled lifestyle. However, these selection criteria also produced a subsample of respondents who varied significantly in their socioeconomic positions. To illustrate the striking nature of this variability, we initially read Brandon's narrative immediately after the transcript of an interview with another respondent, Joseph. Brandon had been contacted and interviewed while he and his partner Kelly were in Florida. Brandon outlined their rationale for making the trip:

> [It's] cold, it's gray, whatever I need some sunshine in my life. I can work remote so I might as well do it from like a pool and a Jacuzzi… Beaches haven't been packed like they said… they have people patrolling the beaches, making sure people are separated like driving up and down, making sure that people are maintaining social distance. [Brandon, 36]

Although traveling to the vacation spot itself likely conferred a level of risk, this respondent indicated that he and Kelly had been careful about adhering to the guidelines while at home and in this new location. Asked about COVID-specific difficulties, Brandon only noted that there had been a delay in getting passports for the couple's planned summer trip to Europe. In stark contrast, Joseph indicated that during this period he had been unable to find work (he had previously worked at a restaurant), was recovering from being stabbed in the face, and had gone hungry at various points during the pandemic:

> I have called 211, and have taken miles and miles of walking to go get full and when I get there, that's what I got presented with. "Oh no, we can't give you anything, you're not in a vehicle." But I wasn't told that by the staff at 211. I was told by them that these people give out food every day from 10am to 12, from 10am to 12, from 10am to 12, from nine to 11. [Joseph 36]

Thirty-year-old Jessica was also out of work, and had been unable to benefit directly from the government-backed stimulus funds because she had been behind on her child support payments. Brittany indicated that at one point prior to the pandemic she and the rest of her family had been homeless, and described concerns related to her family's participation in a transitional housing program they had been involved in for almost two years. Goals of the program included building community and enhancing social support in the government-backed apartments in which they were living. These helpful social events and resources were impossible to continue to access due to the COVID-19 restrictions. In addition, Brittany noted that her husband Joe was unable to work at his "off the books" job as a personal trainer, she had recently begun putting a padlock on the refrigerator in the evening, and their two-year rental period was about to expire. Brittany indicated that recently she was having a "little bit of a freak-out" about all of these coalescing problems:

> So on top of worrying about financial things, my children being, getting sick if I let them outside or being cooped up in this small apartment all the time. My husband leaving the house [he has a kidney ailment], it was like yesterday where, I'm worrying about everything all at once. So my husband, he said, just try to find the peace in it… nobody is sick. We don't have to move right now. We're not moving tomorrow. So just relax a little bit. [Brittany, 35]

Certainly these differences in economic wherewithal do not in themselves trace a straight line to variability in success in social distancing. Yet they provide suggestive evidence that access to sufficient resources is often intimately related to the way the pandemic has been experienced. This provides an important general backdrop for understanding the lower levels of compliance of less advantaged respondents, as reflected in the quantitative results, and as shown more concretely in these qualitative data.

Some respondents outlined direct links between their economic circumstances and difficulty in social distancing. Because he was earning a modest salary, Justin, age 36, lived with three roommates who had generally been ignoring the social distancing recommendations. Thus, while Justin believed the recommendations were important, his living circumstances did not permit him to be in complete compliance, due to the actions of his roommates. He indicated that sometimes he drove around for hours,

but ultimately he had to return to the apartment. Another respondent, 34-year-old Amber, said that she continued to visit with her father, in spite of the guidelines, noting simply: "We share a car. So, when we go to the store, I have to take him to the store."

Trevor's attitude about social distancing was even more resigned. This respondent noted that of the 10 people who lived in his household, only his uncle made a serious effort to comply. And indeed, Trevor indicated that the efforts he did make were largely to avoid his uncle's unhappiness: ("we go along with him so he won't cry"). Further, the efforts consisted primarily of using bleach to thoroughly clean the kitchen every other day, rather than making efforts to limit social contacts. Certainly living with a large number of individuals in the same household may itself make compliance more challenging. However, this respondent's lengthy narrative provides additional context. In addition to the daily realities associated with multiple families living in a relatively small home, Trevor's complete narrative (see below) highlighted that aspects of his unsettled life further limited his attention to compliance with social distancing recommendations.

The in-depth interviews are also revealing as they illustrate that focusing only on those in the immediate household does not fully convey the social circumstances that individuals must navigate—in general, and during the pandemic. Curtis lived with his partner Alicia, who had children from a previous relationship. This circumstance is quite common within the context of this contemporary sample. To illustrate, when assessing the fertility patterns as a couple-based figure, nearly half of respondents name at least one biological child who did not live with them. Many of these respondents described issues related to the children visiting with the absent parent, since they were then unable to oversee activities and social contacts during those periods. Curtis recounted a tense situation involving Alicia's "ex" that centered on the issue of social distancing:

> A couple weeks ago, Alicia's ex took them to a party and there was about 18 people at the park. Ended up a big blowout between her and him about the safety of the kids. Not only them, but then also us, and then anybody else, as far as our whole family. Not to mention the fact that at that time, you know, you still weren't allowed to have any, any kind of gathering over 10 people. So that brought on quite a few issues. [Curtis, 32]

In this example, then, the children might have been exposed during the party, and the parents may have faced additional risk during the face-to-face altercation that occurred when they went to pick them up.

Unsettled Lifestyles and the Hierarchy of Concerns

At the time of his interview, Trevor (quoted above) had recently been released from prison, was not involved in a serious romantic relationship, and had secured a job that he subsequently quit. Further, toward the end of the interview, Trevor began to disclose more sensitive details about recent events that had preoccupied him. This respondent indicated that he asked an acquaintance Jack for a ride home after a get together at his mother's apartment. After making a "quick stop," Jack began to sexually assault Trevor, an incident that lasted almost two hours. This was not the end of this situation:

> When a dude tried to pull that shit, I wasn't having it. So [then] he accused my momma of stealing little packets from his house. Because she was staying with him at the time. When we went over there, he said "Move her stuff out." But in the process of moving her, that's when, that's when me and my unc [uncle] fucked him up. Throw, throw, throw him through the window, beat him up, kicked him, fucked him up bad. [Trevor, 35]

After this incident Trevor was concerned about retaliation, and even quit his job over fears about his own and co-workers' safety. This example illustrates that while Trevor was not the most vigilant social distancer even before the incident, the immediacy of his concerns relating to the assault resulted in additional social exposure (contact with his uncle, staying at different homes to avoid Jack). The serious nature of these issues, then, appeared to outweigh his attention to the risks of contracting COVID-19.

Other aspects of an unsettled lifestyle may underlie the association with less consistent social distancing. As the quantitative analyses documented, a lifestyle that included lack of commitment to a romantic partner, along with a social pattern that included partying and going to bars was associated with lower scores on the social distancing scale. The results in model 3 did not, however, show a direct association between problem substance use and social distancing compliance. Consistent with age-related trends (Chen & Jacobson, 2012), some respondents interviewed indicated that prior to the pandemic, they had been and were still making efforts to move away from their earlier patterns of substance use. In some respects, the conditions of social distancing could be seen as facilitating their recovery. For example, Seth

and his partner Leslie had both been addicted to heroin, and had gotten into a methadone program shortly before the pandemic. Leslie noted they rarely went out, which would appear to be helpful to the "desistance" process (Laub & Sampson, 2003).

> We hang out together a lot every day and spend pretty much all our days together and really depend on each other to stay sober and, you know, we look to each other for support a lot right now. [Seth, 31]

Nevertheless, Seth viewed other aspects of their recovery as significantly more difficult and stressful. At the time of the interview Leslie and Seth were still attending virtual group meetings and counseling sessions, but Seth believed these were not nearly as helpful as the in-person versions. Another source of stress was that their one-year old son had been placed in foster care. And even though they had been granted visitation rights, because of the pandemic they were unable to see him:

> Obviously we didn't get to see him in person for a month and a half. It's been very depressing for us both. We've done some like FaceTime with him over the phone, but it's just been really tough because obviously, you know, he's only one year old. He's not really paying attention.

Another respondent Zachary, age 35, who had recently been convicted of a minor felony, also indicated that he had missed meetings with his probation officer because it was more difficult when these were handled via computer notifications and virtual meetings. Thus, while these individuals had an overall objective to develop more prosocial lifestyles, the conditions of the pandemic continued the unsettled quality of their lives, and accumulated stresses that may not have just hindered the maintenance of the new prosocial path, but their consistency in social distancing. For example, Molly, age 34, told the interviewer that she often sat on the couch visiting with her upstairs neighbor, even though she recognized that these intimate conversations were not consistent with the requirements for social distancing. She missed the support that she had gotten at AA "because I want to go out and mingle, get coffee and see other people, my friends. It's just not the same staring at my phone [virtual meetings]."

Individuals who had not settled down with a single romantic partner in some instances described actions that may have increased their exposure. For example, when discussing his romantic life, Trevor mentioned several "friends with benefits" rather than a single partner. This was thus an aspect of his lifestyle that required him to visit multiple households. Zachary had just met a woman during this period,

and was excited about the relationship. Yet Christine still lived with her ex-husband, and Zachary

indicated that they generally snuck around to see each other (i.e., waited until he left the house to get

together). Tasha, age 34, an R.N., and her partner Keith, in contrast, appeared to have a more "settled"

lifestyle. They both worked in high-risk settings, but relied on one another for support and company

during this period:

> Me and Keith, pretty much stick together. He works... with a shop in a nursing facility. And we've decided that it's just gonna be the two of us. We both work in high-risk places. He doesn't [even] see his daughter. He's got a daughter he doesn't see because he's afraid of giving it to her, putting her at risk…

While the quantitative results focused on involvement in a committed relationship as an index of a settled

lifestyle, the qualitative data illustrate that some of the single young adults we interviewed, often with

children, also exhibited a more settled pattern that extended to the area of strict adherence to the

guidelines. Cassy, a single mother with three children, described their lives and levels of compliance:

> Pretty much staying in the house. We're not going nowhere. We're not interacting with other people. We play sometimes. Or we'll spend time watching a movie together, or we'll do some cooking, read different books with each one of them. A lot of it is keeping them up on the education right now.
> Interviewer: So since March 17th, you've not seen a single family member or a single friend?
> Cassy: Nope. Just stay inside.
> Interviewer: And your kids, they haven't seen a single friend or seen a single family member in person?
> Cassy: No. [Cassy, 32]

The Weakness of Strong Ties

It is intuitive to expect that individuals whose lives are unsettled or troubled may seek the kind of

social support that is inconsistent with the distancing guidelines. However, the in-depth interviews

contain many other instances that fit well with our basic notion that network embeddedness and feelings

of attachment may conflict with the social distancing recommendations. Sarah frequently visited with her

upstairs neighbor, who was also a close friend, even though she was not as vigilant about social

distancing:

> And we just don't see eye to eye on it. So that's why I just keep taking that risk.

> [Interviewer asks about whether she insists on social distancing when visiting]. I would never say that, because I want her to come down. Because she is my best friend and I love her. I just think that she is not gonna listen so I saved my breath. [Sarah 34]

Natalie described a recent incident in which her mother came over to bring some children's clothing, and before she could stop him, her 2-year-old son ran to his grandmother and gave her a big hug:

> There was nothing that was like, "Okay, now's a good time." It just happened. He ran, he ran outside and she grabbed him and, "Oops, it happened." It wasn't uh, "Okay, it's safe now. [Natalie, 32]

Another respondent Courtney, age 36, indicated that she recently had picked up her friend who worked at a nursing home, and had ended up in the hospital from COVID-related symptoms. Courtney not only gave her friend a ride home, but then spent hours cleaning her house after she brought her home. This respondent was aware of the risks associated with being in close proximity to her friend, but simply felt that the friend needed her.

Other interviews, in contrast, revealed that caring and intimate connections were associated with greater vigilance. For example, Elizabeth, age 34, told the interviewer that her father had steadfastly refused to wear a mask, and only did so after she found him an Ohio State version. This example is useful in several respects. First, it highlights that under some conditions closeness and intimacy can act as a catalyst for enhanced social distancing. This, along with the previous examples, points to countervailing tendencies that bring additional context to the quantitative results (level of attachment was not significantly related to level of compliance). Second, the example underscores that a comprehensive perspective on "social influence" requires considering the individual as a potential influencer as well as one who may be influenced by the views and actions of others. This dynamic is undoubtedly represented in the associations presented above, but is not immediately apparent. More fundamentally, all of the examples highlight that the specific orientations of others, and not just levels of attachment, are an integral aspect of these dynamics. For example, Elizabeth traveled some distance to find her father an Ohio State mask, an action that telegraphed her caring and concern for her father, but also her views about the importance of complying with the mask recommendations. Consistent with the results in the

quantitative analyses, then, strong bonds may increase the felt need to behave in ways that are antithetical to social distancing, or enhance the perception that it is important to comply.

Recall that Trevor indicated there had been little attention to social distancing at home. Similarly, he told the interviewer that none of the rest of his extended family or social circle wore a mask, except a sister who had cancer. This created a wide circle of affiliations that would not tend to foster a view of the importance of the guidelines. In contrast, Anna lived with her parents, who were vigilant about the recommendations:

> It's more so like the pressure of well, they want me to do this, so I have to do it. They want me to do this. [Anna further indicated that while her friends were generally compliant, their views did not influence her]: I would say it doesn't matter. I mean it doesn't really include you that much. [Anna, 34]

This example is useful as it illustrates that a comprehensive understanding of Anna's stance with respect to social distancing requires attention not only to her stated beliefs, but to her current life circumstances (i.e., dependence on her parents for housing; hadn't been visiting frequently with friends even before the pandemic). In this case, then, the orientation of her parents was an important part of her decision-making process and eventual actions.

Many recent treatments of social distancing compliance focus on the individual's political leanings, and the quantitative results documented the importance of this factor. Yet the qualitative interviews are revealing as they underscore that even this seemingly individual viewpoint is likely to be influenced by information from and the perspectives of intimate others. For example, Amber (the respondent who shared a car with her father) noted that while she occasionally watched the news, as a young mother with children, her father was a key source of information and dialogue: "he watches news more—you know he's older. I kinda watch the news [but] my dad's basically the one who tells me everything."

Romantic partners may play an even more central role in shaping respondents' views and actions with respect to social distancing. Particularly for those cohabiting or married, not only is communication frequent, but the ability to comply fully is inevitably bound up with the partner's own perspective and behavior. For example, 36-year-old Tyler had frequent fights with his partner Jaqueline, noting that she

kept going out to see her friends even though he is a high risk individual with asthma, lung problems, and other health issues. Tyler indicated that he eventually gave up to avoid constant arguments. Conversely, Holly, 32, indicated that she was the one who was keen to comply with the social distancing recommendations, but her partner Darren continued to have male friends over to "party" in their basement. In this case, then, Darren's perspective and actions directly impede Holly's ability to comply fully with the recommendations. Other respondents such as Tasha and Keith, cited above, shared views about social distancing, and their agreement on these issues provided the basis for mutual reinforcement when new situations inevitably emerged, calling for additional rounds of decision-making.

A Patchwork of Beliefs

As noted at the outset, health belief models are generally consistent with the SI perspective in suggesting that cognitive processes are inextricably linked to behavioral choices. Yet this perspective and our analyses to this point have foregrounded to a greater extent the role of social interaction and communication in the process of crafting those beliefs and enacting the associated behaviors. This process is not in itself mindless. For example, individuals, particularly by the time they are young adults, have a significant role in managing their circle of social contacts (Emirbayer & Mische, 1998). Further, meanings become solidified via a relatively unique filter that reflects the confluence of individuals' past experiences, current circumstances, and an imagined future, and in turn, their assessments of where things fit with their most salient identities (Stryker & Burke, 2000). To illustrate, Trevor's experiences in prison may have influenced his views about the need to retaliate and show toughness after his victimization, concerns that he considered pressing relative to the need to comply with the social distancing recommendations.

Beliefs, then, are likely to be influenced by social location and influence processes. Yet the individual nevertheless "puts it all together." With an emerging phenomenon such as the pandemic, it is particularly important to document the *content of* specific beliefs about COVID and social distancing, as these are fundamental to an understanding of the process, and could be targets for changing these specific attitudes.

Our view is that with respect to such beliefs, there are limits to a generic template such as "personal assessment of risk" since each form of health behavior compliance or changes in health promoting activities reflects unique considerations and dynamics. For example, smoking may involve social considerations, but is not as inherently social as HIV risk-taking (Manning et al., 2012); in turn social distancing compliance involves dynamics across an even wider range of social contexts. Our analyses of the in-depth interviews also underscored that attitudes and actions respondents described sometimes seemed inconsistent or "mismatched," and may include apocryphal beliefs. Understanding how individuals frame the problem and these unique concerns may be especially important in this context, as responses to this new phenomenon have dramatic ramifications for health and well-being.

Ken indicated that he had initially been quite concerned about his risks (a key assessment from the perspective of the HBM). Yet this respondent told the interviewer that in spite of his COVID-related fears, his job required him to enter a plant that had recently experienced COVID-19 positive cases.

> And so I'm working in _____ and I'm like, whoa, _____'s the second place that got it over New York. So I'm working in there and I'm still here, I'm still alive. There was COVID in [another] factory that I worked at. And I said, well, if I don't get it from this, then it's not that serious. So that was my verdict right there. That was my outline. So, it's been six weeks… and I haven't got sick. So this is how I feel about COVID. Some people get sick. Some people don't. Some people are allergic to medicines, some people aren't. [Ken, 34]

In this instance, Ken's experiences and resulting cognitive transformation fostered a false assessment of risk, and less social distancing compliance based on this assessment (Thomas & Thomas, 1928).

Zachary's narrative reflects an even more fanciful assessment of his own risk. He described at length a recent trip to the emergency room and intensive care unit, where he was diagnosed with congestive heart failure. This respondent also wore a breathing machine at night for his sleep disorder, was diabetic, and took suboxone due to his earlier opioid addiction. In spite of these major health issues, in response to a direct question, Zachary hesitated to label himself high risk:

> Not necessarily I guess I am, but I'm not. I don't know how to explain it. I don't feel like I'm that old, I guess. And I don't feel like... I mean I don't know, I do have some health issues but I mean I feel like I got a strong immune system yet, but that's just my opinion.

Another respondent, 34-year-old Andre, described changes over time in his assessment, but indicated that he had become more rather than less concerned over time. This respondent said that he was not too vigilant in the early days of the pandemic, but began to take things more seriously after four people he knew personally had contracted the virus and died ("after they passed…").[1] Nevertheless, consistent with the idea of a sometimes inconsistent "patchwork" of beliefs and actions, Andre never wore a mask.[2] He believed that since researchers had documented that COVID-19 was primarily an airborne virus, it would likely penetrate the mask anyway. He also tried to limit his social contacts, but continued to visit his elderly aunt—even after she told him not to do so ("I just go in and check on her").

As noted, results of the quantitative analyses show a strong effect of conservative political beliefs on compliance, and the in-depth interviews are generally congruent with the importance of this constellation of beliefs. As the previous set of interviews (w6) were most often completed in respondents' homes, the interviewer noted that Brett, aged 34, had a KKK membership certificate hung on his wall. During Brett's more recent interview, he indicated that he no longer displayed this plaque. Yet he had recently been fired from his job at a car wash for calling his co-worker "the N word." Brett complied with the mask-wearing mandate at his current job (making pizza), but had a very "hands off" view of any responsibilities for the well-being of other people. For example, he lived with his girlfriend's sister and his girlfriend and her son. However, Brett had not discussed with them the need for limiting social contacts. Further, he told the interviewer he was not worried about himself because he has "a good immune system," and felt that serious consequences were generally limited to older people. Yet he subsequently told the interviewer that he was not particularly worried about his mother either, even though she was older and battling cancer at the time of the interview. Potentially limiting any challenges to this set of beliefs, Brett indicated that most of his information was from "YouTube videos" and his girlfriend.

Chase, age 32, provides an interesting example of the construction of beliefs that appear consistent with the idea of "conspiracy theories," but in this instance his views do not conform to an expected narrative:

> I've seen a movie, I can't remember the name of it. But they were talking about it and this movie was made in 2017 or 2018. And they were talking about coronavirus, talking about a manmade disease that's gonna you know, spread and infect and kill people.

Nevertheless, in contrast to popular associations of a plot perhaps traced to China and that has often been associated with right-leaning views and media outlets, Chase blamed President Trump for these developments ("My belief is he'll do what he needs to to get reelected in office.")

Other examples of inconsistent beliefs and actions include a strong reliance on cleaning products on the part of many respondents. Thoroughly cleaning surfaces is one of the recommended guidelines, and importantly, such references reflect that most individuals had not completely discounted the dangers of contracting the virus. However, Will, age 32, for example, described an incident in which he had argued with his partner about having a barbeque with friends. He noted that they eventually compromised in only inviting couples, using plastic dishes, and spraying down surfaces thoroughly after the guests had left. Cindy, 35, also described significant levels of concern about COVID, but felt the need to converse frequently with her best friend Tiffany. Cindy described her attempts to mitigate the effects of face-to-face contact, indicating that she routinely sprayed this friend's boots before she came into her apartment.

Catherine, 32, also relied heavily on hand sanitizer, but then indicated that she did not wear a mask at her job at a dollar store.[3] In outlining her beliefs about the efficacy of mask-wearing, Catherine stressed that since she handled money all day, once she used her hands to take off the mask in the car, germs would get on her face regardless. Jaime, 31, provides another example of such inconsistencies, in that she was vigilant about making her children wear masks, but did not wear one herself (again prior to the mandate). Sherry offered still another take on the value of wearing masks that influenced her children's compliance:

> So if you keep up with your health, if you eat healthy, if you don't put all the toxins in your body and keep up with your vitamins and your minerals, then you're fine because our body… it makes a natural immunity. How do you get immune to something? By being introduced to it. I don't wear masks. Only when I'm at work. I don't allow my children to wear masks. Because one you're sucking your own CO_2, the carbon dioxide, you cannot breathe in carbon dioxide. We all know that you can die. [Sherry, 35]

Consequences of Social Distancing for Trajectories of Compliance

Some of the excerpts included above provide evidence of changes over time in levels of compliance with the social distancing recommendations. For example, Ken became less compliant after he did not contract the virus at the auto plants where several cases had been reported. In contrast, Andre indicated that he had become more vigilant largely in response to knowing multiple individuals who had died after contracting the virus. Certainly another reason for changes over time relates to city and state mandates. As noted previously, some of these interviews took place when mask wearing was strongly recommended but voluntary in many states in which respondents resided. Further, while it is not possible in this analysis to provide a detailed assessment of all of the *consequences* of experiencing the pandemic and the "lived reality" of social distancing, the qualitative interviews make clear that how this period has been experienced is undoubtedly integral to the "meaning construction" process. In turn, such reactions or consequences may figure into long-term variability in compliance. A straightforward example is simply accumulated feelings of loneliness that may underlie the decision to eventually let a friend into one's apartment. In addition, many of the respondents have preschool and school-age children. Thus the narratives are replete with references to the extra stresses of having children at home all of the time, as well as helping them each day with online coursework (Power, 2020). For example, Amber (mentioned earlier) felt overwhelmed by her responsibilities, telling the interviewer:

> The teacher kind of just gave me these packets and said "here you go." That puts a lot of pressure and strain. And I really can't comprehend stuff either. So, it's kind of hard. [Interviewer: because of what?] I just, just because I was in special ed classes. Just cause I can't comprehend stuff. Reading basically.

These stresses may link in systematic ways to socioeconomic disadvantage, as outlined above and as shown in Table 2. Thus, the more advantaged respondents who had attended college on average may be better positioned to assist with the various subjects. Over time, the accumulation of such stressors may result in a departure from the social distancing guidelines, since, for example, accessing social support is generally recognized as one important way to alleviate feelings of stress and anxiety.

Those whose lives had previously been "unsettled," might also experience additional stressors that eventually sabotage their efforts to develop a more prosocial lifestyle. For example, recall that while

Leslie and Seth had been attempting to remain sober, they had trouble connecting with counselors, and had been unable to see their daughter. It is thus possible to conceptualize a constant feedback loop in which the conditions of the pandemic—and associated outcomes such as depression or substance use—may decrease the overall level of compliance—even if individuals started out with beliefs that generally supported the importance of complying with the social distancing recommendations.

CONCLUSION

Consistent social distancing has been shown to reduce the spread of COVID-19, and these strategies continue to be important as new vaccines have been developed and administered. In addition, the behaviors public health officials stress (limiting social interactions, wearing a mask) have significant potential in the event that novel viruses appear on the horizon. Individuals inevitably make their own decisions about whether to comply with each of the suggested recommendations, but the current study has highlighted the extent to which social influences and considerations are linked to observed variability in levels of compliance. The findings are potentially useful theoretically and have practical implications, as they underscore that the more individualistic emphasis of the "health belief model" approach, while foundational, does not provide a comprehensive framework for understanding behaviors that fall under the umbrella of "social distancing." Indeed, study results based on survey data elicited from a large sample of adults, and in-depth interviews with a subset of respondents, underscore the need to confront the degree to which this form of disease spread and these mitigation strategies are fundamentally social in multiple respects. A second general implication of the study findings is that they complicate the well-established notion that strong ties to others are reliably linked to more favorable health outcomes. For example, measures of attachment to parents and romantic partners were not significantly related to self-reported compliance with social distancing recommendations.

The in-depth qualitative interviews illustrated that close ties may work at cross-purposes with or support the individual's social distancing behaviors, depending on the orientation and behaviors of these significant others. Consistent with this notion, a more systematic assessment relying on structured

questions and the larger sample indicated that the compliance of family members and peers as well as perceived pressure on the part of the romantic partner to comply were all associated with higher levels of social distancing. With the exception of the measure of peer compliance, these associations were attenuated once the indices reflecting beliefs supporting compliance were introduced. This pattern of results suggests that some measure of the influence of close relationships is likely indirect, in fostering and reinforcing those beliefs that increase or diminish the individual's own likelihood of complying with the recommendations. And indeed, supplemental analyses showed that the behaviors of these significant others were related to the beliefs that emerged as significant predictors of compliance for this age group (i.e., the belief that social distancing is an effective strategy, altruistic considerations (need to protect one's family), and political orientation).

Results are consistent with a symbolic interactionist perspective, as the SI theoretical tradition forges intimate links between social interaction and communication and beliefs that serve as guide to action. Thus, it is potentially useful to consider "health beliefs," while central, as a provisional consolidation of a complex process, rather than a stand-alone basis for understanding and motivating compliance with these kinds of health recommendations. Further, the results, particularly those based on qualitative analyses, highlight the processual and situated aspects of these perspectives and forms of decision-making. For example, an individual may hold generally positive views about the need to social distance, but suspend them when presented with a friend at the doorstep who expresses a need to talk about a pressing problem.

The findings also buttress the long-standing sociological emphasis on the effects of an individual's social location, and an array of studies that have linked socioeconomic status to more favorable health outcomes. Results indicated that, at the bivariate level, higher educational attainment was associated with greater compliance, and work context (inability to work from home) was associated with lower levels of social distancing with all covariates included. However, consistent with the SI perspective, our objective was to illustrate how local circumstances make tangible and further influence this variability. For example, net of these basic educational and occupational circumstances, indices reflecting an unsettled lifestyle (partying, lack of commitment to a romantic partner) were systematically linked to lower levels

of social distancing compliance. Here the longitudinal design was a particular asset, as we were able to use measures of these circumstances elicited close-in time to but prior to the start of the pandemic.

The qualitative data added to this portrait in two ways. First, individuals with fewer resources or unsettled lives often faced an array of challenges that may have directly limited their ability to social distance effectively. Examples include living with unrelated individuals who may not consider social distancing a priority, inability to control all members of a large, multigenerational household, and/or difficulties handling child visitation involving previous partners. A second more circuitous route relates to what we labeled the "hierarchy of concerns" as described by some of the less well-situated respondents. Faced with housing and food insecurity, debt, victimization, or the need to comply with rules of parole/probation, some individuals may have prioritized such pressing concerns over the goal of consistent compliance with these public health recommendations.

Results support theories that have focused on beliefs as guides to action, and indeed, the notion that shifts in beliefs are important to the process of making behavioral changes. A potential contribution of the current study is not only to advance the view that social factors are important in shaping those beliefs, but that one's social ties are potentially influential and may present challenges throughout the change process (here, the compliance journey). It is quite possible that specific health outcomes are influenced by social factors to varying degrees and in different ways. For example, making changes after a diabetes diagnosis may link less directly relative to influences on social distancing patterns. In addition, the study findings highlight the importance of documenting *specific* beliefs that relate to social distancing (and by extension any health outcome/change). The general scales measuring health beliefs are important, but, for example, we found that altruistic considerations (need to protect family) were more important than personal assessments of risk—a key aspect of the health belief model. With respect to this particular context and age group, individuals tended to—correctly—view themselves as being at relatively low risk relative to older individuals. The qualitative data showed that this view even extended to some individuals who clearly fit into the "pre-existing conditions" category. These findings suggest that public health messages

targeted at these age groups might be more effective if they focused heavily on altruistic themes, rather than attempting to change views about the individual's own level of risk.

Another limitation of reliance on a general health-beliefs template is that in this study, we found that individuals evidenced a kind of *patchwork of beliefs* that were not in perfect alignment. Perhaps due in part to the recency of the phenomenon of the pandemic, individuals sometimes endorsed particular beliefs but not others, behaved in ways that were not consistent with beliefs that were generally positive toward social distancing, or developed apocryphal beliefs that had little to no scientific support. Thus, it is important to continue to explore the content of these views, including areas of inconsistency and erroneous beliefs, as these warrant attention if messaging is to be crafted in more effective ways. By extension, each health area targeted for research and intervention, whether focused on substance abuse, smoking cessation, intimate partner violence, or social distancing, is likely to benefit from additional detailed research on specific beliefs and configurations of beliefs that are linked to these particular issues.

The current study benefited from its longitudinal design in some respects (e.g., "partying" was measured immediately prior to the start of the pandemic, and thus does not reflect reactions to the conditions of social distancing). Nevertheless, a study limitation is that levels of compliance on the part of significant others were necessarily measured contemporaneously with the respondent's own self-report, and were provided by the respondent. Thus, the observed associations likely reflect: a) the reciprocally related aspects of these dynamics—i.e., that respondents are also potential "influencers," b) for some, an initial similarity in orientation (e.g., compatible political beliefs), and c) the potential for reporting bias. Prior longitudinal studies of social influence across a range of content areas have documented effects of both selection and "socialization," particularly with respect to peer influence, and shown that direct measures provided by others generally reveal a somewhat smaller but still significant social ties effect relative to self-reports (McGloin & Thomas, 2019). Further, the long-standing emphasis on perceptions within symbolic interactionism is important within this context. For example, if an individual believes that friends are consistent social distancers, this may be more important than whether they sometimes violate the guidelines (Thomas & Thomas, 1928). Thus, in key ways, these views about significant

others' behaviors are another component of individuals' repertoires of health-related beliefs. Nevertheless, a longitudinal lens and direct reports could help to clarify further these social dynamics.

Media treatments of social distancing and some research studies have centered on the ways in which social distancing, including mask wearing, has become politicized. We focused primarily on the social factors and beliefs that were significant net of political orientation, but an intuitive next step is to more systematically examine links between political views and the basic social processes we highlighted. This would ideally include attention to the role of others in the acquisition and maintenance of political beliefs, as well as those relating more directly to compliance behaviors.

Gendered aspects of these dynamics need greater scrutiny in future research on compliance processes. We assessed the impact of gender on key focal variables, and a majority of gender interactions were not significant, indicating, for example, a similar effect of reports of family compliance on women's and men's reports about their own compliance. Exceptions were that while the behaviors of friends mattered for both women and men, the effect on men's social distancing was stronger. Similarly, beliefs about the effectiveness of the social distancing measures were significantly related to compliance across gender, but we documented a stronger relationship for men. Nevertheless, consistent with prior research, women on average reported higher levels of compliance. This basic finding suggests the need to explore in more detail the dynamics associated with women's efforts to encourage partners and other family members to comply. For example, frustrations relating to less than successful efforts may add to the stresses that have been considered in other recent studies of the gendered aspects of experiences with the pandemic (e.g., women's roles in monitoring the children's schoolwork, difficulties managing employment and child care) (Power, 2020). In contrast, in this sample, race/ethnicity were not associated with the social distancing compliance scale in the full model, and a supplemental model focused on mask wearing indicated that black respondents were more compliant with this recommendation. It is critically important to examine these findings relying on different samples and age ranges. However, this result offers a provisional indication that barriers to health care and other structural disadvantages may be more important than behavioral differences in adherence to these recommendations. The in-depth interview

also pointed to some specific family circumstances that may vary by race/ethnicity and operate as constraints on effective social distancing (residing in a multi-general household).

The quantitative results were necessarily based on self-reports of compliance at a specific time point, but the qualitative data and the SI perspective itself emphasize the unfinished, processual character of these forms of decision-making. Thus, in future research studies, longitudinal data are needed to explore the process of attempting to sustain compliance, as "COVID fatigue" has set in, and other concrete life problems—some directly related to the pandemic—continue to unfold. Related to this, the rapidly developing research on consequences of the pandemic for outcomes such as drinking, IPV, and depression and our focus here on compliance should be further integrated, and linkages explored more systematically. Thus, analyses are needed that examine not only whether levels of depression have increased, but whether such changes in emotional well-being are related to less consistent compliance with the social distancing recommendations.

In spite of these and other study limitations (e.g., the regional nature of the sample), results support the need for a more thoroughgoing sociological approach to understanding social distancing. Our perspective is consistent with a growing interest in the social determinants of health; yet our theoretical and empirical treatment moved beyond the focus on social location (e.g., SES) to document ways in which local life circumstances and social network dynamics contribute further to observed variability in compliance. In addition, while beliefs are important underpinnings of behavior and behavior change, we explored some of the social aspects of acquiring those beliefs, as well as direct social influences on compliance. Finally, our theoretical perspective and analyses suggest a more general notion and direction for future investigations: research on beliefs is likely to benefit from additional attention to those views that are specific to a particular outcome, as well as to the more general dimensions that form the core of the "health belief model." It is likely that understanding more about these specific cognitive and social dynamics and the connections between them will provide the most useful framework not only for theory building, but for developing more targeted and potentially effective interventions.

NOTES

[1] The survey module included a question about whether the respondent personally knew anyone who

had contracted COVID-19; however, this factor was not associated with social distancing in our

multivariate analyses.

[2] Across the full sample, 33% percent who reported high levels of compliance with the social distancing

guidelines indicated that they did not wear a mask.

[3] This interview took place prior to a statewide mandate.

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Table 1. Descriptive Statistics for all Study Variables (n=604)

DEPENDENT VARIABLE	Mean/Percentage	SD	Range
Social Distancing	3.960	0.62	1 – 5
INDEPENDENT VARIABLES			
Socioeconomic Status/Work Context			
Education			
High school or less	21.69%		
Some college	32.95%		
(College or more)	45.36%		
Income[a]	$44,772.35	$50,751.97	$0 – 650,000
Unable to work from home	2.589	1.42	1 – 5
Unsettled Lifestyle			
Lack of relationship commitment	1.943	1.07	1 – 5
Partying	2.563	1.23	1 – 8
Problem drug/alcohol use	1.324	0.45	1 – 5
Adult Arrest	20.53%		
Characteristics of Social Ties			
Attachment to parents	4.198	0.95	1 – 5
Attachment to partner	4.805	0.55	1 – 5
Friends' social distancing compliance	3.637	0.79	1 – 5
Family social distancing compliance	3.714	0.88	1 – 5
Partner pressure to comply	21.85%		
Beliefs			
Political beliefs (conservative)	2.978	1.05	1 – 5
Health Beliefs			
Effectiveness of social distancing	3.821	1.07	1 – 5
Altruistic motive (protect family)	4.065	0.96	1 – 5
Perception of personal risk	2.688	1.183	1 – 5
Perceives age group at low risk	3.103	1.069	1 – 5
Sociodemographic Controls			
Race/Ethnicity			
(White)	74.83%		
Black	13.74%		
Hispanic	11.42%		
Gender			
(Male)	39.57%		
Female	60.43%		
Age	34.094	1.71	31 – 38
Parent	73.18%		

[a] Income values were logged in multivariate analyses

Table 2. Coefficients for the OLS Regression of Social Factors and Beliefs on Social Distancing (n=604)

	Zero Order	Model 1	Model 2	Model 3	Model 4
Socioeconomic Status/Work Context					
Education					
High school or less	-0.222**	-0.155*	-0.153*	-0.106	0.030
Some college	-0.150**	-0.099	-0.095	-0.042	0.022
Income	-0.006	0.001	0.002	0.002	0.001
Unable to work from home	-0.161***	-0.148***	-0.147***	-0.135***	-0.100***
Unsettled Lifestyle					
Lack of relationship commitment	-0.036		-0.037	-0.067**	-0.046*
Partying	-0.049*		-0.041	-0.045*	-0.045*
Problem drug/alcohol use	-0.093		0.034	0.031	0.005
Adult Arrest	-0.151*		-0.050	-0.051	-0.003
Characteristics of Social Ties					
Attachment to parents	-0.030			-0.035	-0.025
Attachment to partner	0.027			-0.035	-0.024
Friends' social distancing compliance	0.240***			0.148***	0.102**
Family social distancing compliance	0.196***			0.092**	0.044
Partner pressure to comply	0.174**			0.172**	0.073
Beliefs					
Political beliefs (conservative)	-0.248***				-0.089**
Health Beliefs					
Effectiveness of social distancing	0.262***				0.093***
Altruistic motive (protect family)	0.287***				0.128***
Perception of personal risk	0.001				-0.010
Perceives age group at low risk	-0.096***				0.005
Sociodemographic Controls					
Race/Ethnicity					
Black	0.023	0.133	0.163*	0.149*	0.062
Hispanic	0.033	0.123	0.138	0.163*	0.075
Gender					
Female	0.259***	0.198***	0.176**	0.152**	0.105*
Age	-0.033*	-0.036*	-0.038**	-0.047***	-0.034**
Parent	-0.039	-0.068	-0.099	-0.097	-0.057
Constant		5.516***	5.742***	5.489***	4.602***
R^2		.183	.194	.267	.386

Appendix A: Qualitative Interview Sample, Procedures, and Approach to Data Analysis

Recognizing the newness of the pandemic and the phenomenon of social distancing, the research design called for additional interviews relying on a less structured format relative to the survey protocol. This method has the potential to reveal nuances of meaning and sequencing and other aspects of these experiences that are difficult to detect relying on traditional multivariate analyses. In addition, important social dynamics and beliefs may emerge that were not included in the pre-established items and scales comprising the survey. Our original objective was to complete 50 interviews with a subset of the TARS respondents, and the final sample included 54 such in-depth interviews. With respect to selection criteria, our goal was to achieve variability on two potentially important dimensions of respondents' lives—their levels of social connectedness and the degree to which their lifestyles could be described as settled/unsettled. While we relied on these initial selection criteria, we expected and found that the resulting sample differed along many other dimensions, including their socioeconomic status and job circumstances, level of social distancing, union status (i.e., married, cohabiting, dating), and political orientation. With respect to self-reports of social distancing compliance, a comparison of means indicated that on average the qualitative subsample reported similar levels of compliance relative to the total sample.

Social involvement

To obtain variability on the character of the respondents' social ties, we selected 26 respondents relying on wave six measures of closeness to parents and levels of peer involvement. Wave six data were collected immediately prior to the start of the pandemic, and thus conditions of the pandemic would not affect their reports about these circumstances. Prior research has demonstrated skewed reports of favorable overall attitudes toward friends (reflecting their own choice-making), and thus we have previously drawn on frequency of contact as an index of this form of social involvement (authors). We expected, based on prior analyses relying on the TARS data, to achieve an adequate level of variability in

closeness to romantic partner without specifically targeting this factor, and found this to be the case. Attachment to parents was measured using the straightforward item "I feel close to my parents." Responses ranged from 1 "Strongly Agree" to 5 "Strongly Disagree" on a 5-point Likert scale. We created a binary indicator of whether or not the respondents reported attachment to parents in which responses of "Agree" and "Strongly Agree" were coded as close to parents. Peer involvement was measured using the item, "During the past week, how many times did you hang out or spend time with your friends?" We created a binary indicator measuring whether or not the respondent reported frequent involvement with peers. Responses of 3+ times were coded as 1 indicating frequent involvement. Next, we created four categories of levels of social involvement: 1) Close to both parents and peers, 2) Not close to parents or peers, 3) Close to parents only, 4) Close to peers only.

To select respondents for interview, a research assistant listed all respondent IDs that fell into each category and randomly selected 20 IDs using a random number generator. These IDs were then given to the interviewer to contact respondents. Thirty interviews were completed based on levels of social involvement. These interviews included 7 respondents close to both parents and significantly involved with peers, 6 respondents not close to parents or frequently involved with peers, 8 respondents close to parents but not frequently involved with peers, and 9 respondents who were frequently involved with peers but did not report closeness to parents.

Unsettled lives

The multivariate analyses relied on several indicators that fit under the general rubric "unsettled lives." Yet our goal in selecting respondents for the in-depth interview to reflect variability along this dimension was to avoid trivial cases (e.g., a respondent who had not fully committed to a romantic partner but who owned her own home, held an advanced degree, and had a stable, full-time job). Unsettled lifestyle was thus defined here based on responses to whether the respondent experienced any prison/jail as an adult as well as responses to questions about problem drug and alcohol use. Any prison/jail was measured with a binary item indicating whether the respondent had experienced prison or jail in their

adult life. Problem drug and alcohol use was measured using the items "How often in the past year (or 12 months) have you experienced these things:"

- Felt unable to do your best job at work or school because of… (alcohol use, drug use)

- Had problems with a partner you were dating, living with, or married to because of your… (alcohol use, drug use)

- Found it difficult to parent your children because of your… (alcohol use, drug use)

- Hit one of your family members because of your… (alcohol use, drug use)

- Gotten into fights with others because of your… (alcohol use, drug use)

- Had problems with your friends because of your… (alcohol use, drug use)

- Gotten into a sexual situation that you later regretted because of your… (alcohol use, drug use)

- Gotten violent with your partner because of your… (alcohol use, drug use)

Responses ranged from 1 "Never" to 7 "2-3 times a week". These were recoded into binary indicators capturing problem use. Responses were coded as 1 if the respondent reported problems occurring once a month or greater frequency of problems (4 to 7 on the scale). We then created a single dichotomous variable (1=any problem use, 0= none) based on whether the respondent reported problem use on any of the above items.

We recognize that this strategy does not account for all the different meanings of unsettled lifestyles. However, again based on prior qualitative and quantitative analyses with this sample, we have found that those with criminal justice experience (particularly the higher end of seriousness reflected by jail or prison time) and/or substance use problems represent a nexus of 'unsettled' characteristics. In short, they are more marginalized economically, experience unstable housing and frequent residential moves and other 'unsettled' features of their lives in addition to meeting these selection criteria.

To select respondents for interviews, a research assistant first listed all respondent IDs who reported any prison/jail in their adult life, and gender of respondent was also recorded. Then, respondent IDs were randomly selected using a random number generator. Twenty-five respondents were interviewed based on

their reports of unsettled lives. From a list of 30 respondents, the interviewer contacted and completed interviews with 2 women and 10 men with prison or jail experience. In a similar manner, a research assistant listed all respondent IDs who reported any problem drug/alcohol use by gender. The interviewer contacted and completed interviews with 2 women and 10 men who fit into this category. This focus on higher end definitions of 'unsettled' resulted in more men than women in this subset, consistent with the overrepresentation of men in the criminal justice system and known rates of problem substance use by gender (Brady & Randall, 1999; Carson, 2020). Nevertheless, the social connectedness subgroup contained women who could be considered unsettled relying on slightly less serious criteria. For example, across the total qualitative sample, 35% of women interviewed reported at least one arrest, compared to 14% percent of the rest of the total TARS sample.

In-depth Interview Process

The qualitative interviews took place over the phone, due to the restrictions on face-to-face contact posed by the pandemic. The interview began with an expression of appreciation for taking the time to be interviewed, and with a reminder that everything that was shared would be strictly confidential. A thank you Visa or Amazon gift card of $75 was provided for participation. It was generally not difficult to elicit conversation about the pandemic, COVID-19, and social distancing, since this topic was for most people a key preoccupation and source of conversation with others during this time period. The interviewer who conducted these in-depth interviews has extensive experience conducting this type of interview, and many prior investigations have covered more sensitive topics (e.g., intimate partner violence). Accordingly, if issues related to arrest, drug use, or homelessness came up during the interview, this interviewer was skilled at handling these aspects of their lives with respect and sensitivity.

Protocol

The qualitative interview protocol itself consisted of questions designed to elicit information along several dimensions, with the overarching goal of producing a narrative about the respondent's experience

of the pandemic and social distancing. The introduction itself included the general objective ("we wanted to again follow up and find out how you have been doing since we last interviewed you, your experiences with and feelings about the recent coronavirus epidemic and the social distancing guidelines that were put in place in many states"). The extended conversation focused on eliciting responses about: a) Basic Transitions or other features of the respondent's current circumstances, b) romantic relationship status, dynamics, and responses of the partner to the pandemic and social distancing, c) views about the wider network of influences, including children/child rearing challenges, as well as any influences of parents, peers and others, and d) information about the dynamics of compliance (i.e., changes over time, inconsistencies in compliance). As the interviews unfolded, probes related to these domains, but followed up on the areas that the respondent considered important. Every attempt was made to allow respondents to introduce aspects of their lives that were important from their own points of view, and to describe positive as well as negative aspects of social distancing compliance. The questions were also designed to allow the individuals to indicate that others had very little influence on their own attitudes/behavior as well as to specify which individuals had an influence and what the nature of any influence entailed. The resulting interviews averaged 33 pages of transcribed material, with a range of 15-66 pages.

Characteristics of the Qualitative Sample

We tracked gender distributions as the interviews proceeded, and thus the final sample was equally divided by gender. The TARS sample itself is diverse, and the qualitative subsample includes a somewhat higher share of minority respondents. This appears to be driven largely by the greater risk of incarceration for minority individuals. Thus, 30% of the qualitative subsample was black, as contrasted with 13% of the rest of the TARS sample. The percentage of Hispanic respondents was more similar (9% of the qualitative subsample vs. 11% of the rest of the TARS sample). Similar to the larger sample, the average age of those who participated in the in-depth interviews was 34 years, with a range of 31-37.

Analysis of the In-Depth Interview Data

A core group of five graduate students transcribed and read all of the COVID-19 qualitative interviews and subsequently created 2-to-3-page abstracts for each interview. These abstracts provided a broad summary of the interview and described key domains, including the basic transition information, as well as respondent views about how COVID-19 may have affected aspects of their lives. For example, one respondent worked full-time in a restaurant kitchen prior to COVID-19, but during the pandemic had been laid off and worked part-time in a pizza kitchen. Descriptions not only included a summary of relevant information about each area, but key quotes from the respondent captured their own perspectives. Each week recently transcribed interviews were discussed in detail at project meetings. Any concerns regarding transcribing or abstracting were raised and the group came to consensus about how to handle these issues. These discussions were helpful in providing further insights in understanding emerging themes in the qualitative interviews, and allowed the research team to connect these themes to possible analyses relying on the structured data. For example, several respondents mentioned that knowing someone who had COVID-19 had been a basis for becoming more serious about social distancing. As a question had been included about this in the structured survey, it was possible to assess this association more systematically relying on the full sample and complete roster of focal variables and controls. As indicated in Footnote 1, this variable was not significant in our multivariate analyses. As the project progressed, we moved from organization around the interview questions to further exploration of emerging themes. Atlas.ti facilitated the handling and sorting of the qualitative data around these emerging areas of interest.

The first author began the qualitative analysis with an extended period of open coding and memo writing prior to developing provisional themes and associated codes that also incorporated other team members' insights. The approach was generally consistent with the method of constant comparison (Glaser & Strauss, 1967). While the most basic comparison involved examining the narratives of consistent social distancers and those who had been inconsistent or even indifferent to the guidelines, other comparisons included comparisons of men's and women's accounts, and analyses of the way respondents described the influence of specific intimate others on the respondents' own attitudes and

decision-making. The narratives themselves often contained a strong compare and contrast element, as for example when respondents compared their own attitudes and compliance behaviors with those of their partners. After this period of open coding and comparative analysis, more specific codes were developed around emerging themes. This eventually required a return to the full data set, and coding text segments with codes reflecting more specific, somewhat more conceptual codes (e.g., mismatched beliefs). Other text segments were coded around themes that eventually formed the core of the qualitative analysis discussion, including, for example, "changes over time" or "influence of parents." Returning to the full qualitative dataset provided a hedge against overemphasis on certain compelling or 'striking' cases, and we also relied on the structured survey, larger sample, and quantitative analyses for this purpose (as in the example of knowing individuals who had COVID-19 and relationship to social distancing).

The discussion of the qualitative data included in the current paper is not designed to describe all of the insights from our analyses of these lengthy narratives. Instead, our goal was to further elucidate the findings from the quantitative analyses, while capturing distinctions of meaning and process that are often impossible to highlight drawing on a quantitative approach. The order of the discussion was designed to provide at least a modest indication of the process of exploring these materials as this unfolded over the course of the project. For example, the differences in narratives of the more advantaged and disadvantaged respondents were striking. This was an important backdrop for any comprehensive understanding of the challenges individuals faced as they began to grapple with the realities of the pandemic and the social distancing recommendations. Thus, while space limitations precluded a full exploration, the juxtaposition of two cases high in contrast on the disadvantage-advantage continuum provides needed context or backdrop for the rest of the more focused discussion. Similarly, we were unable to explore fully the role of reactions to the challenges of the pandemic (e.g., increased depression), but we concluded with a final section that makes clear that this is a key part of considering social distancing as process, and could influence observed changes over time.

References

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Appendix B: Quantitative Supplement

Appendix Table B1. Items Included in Multi-Item Constructs

Social distancing
  When the social distancing guidelines were suggested, how often did you:
    increase the physical space between you and other to avoid spreading illness?
    stay at home to avoid spreading illness?
    go to a grocery store or pharmacy?
    hang out with or spend time with your friends (who don't live with you)?
    hang out with or spend time with family (who doesn't live with you)?

Lack of relationship commitment
    I may not want to be with X a few years from now
    I feel uncertain about our prospects to make this relationship work for a lifetime

Partying
  In the PAST YEAR (OR 12 MONTHS), how often have you:
    gone to a bar, pub, or nightclub?
    gone out to party with friends?
    gone out to party with your spouse or partner?

Problem drug/alcohol use
  How often in the PAST YEAR (OR 12 MONTHS) have you experienced these things:
    Not felt so good the next day because of drinking
    Not felt so good the next day because of using drugs
    Felt unable to do your best job at work or school because of drinking
    Felt unable to do your best job at work or school because of using drugs
    Had problems with a partner you were dating, living with, or married to because of your drinking
    Had problems with a partner you were dating, living with, or married to because of your using drugs

Political beliefs (conservative)
    Politicians, the news and other social media have exaggerated the risk
    The government should not tell me what to do

Source: Toledo Adolescent Relationships Study (TARS)

Appendix Table B2. Coefficients for the OLS Regression of Social Factors and Beliefs on Mask-Wearing (n = 603)

	Zero Order	Model 1	Model 2	Model 3	Model 4
Socioeconomic Status/Work Context					
Education					
High school or less	-0.388***	-0.454***	-0.430***	-0.352**	-0.121
Some college	-0.229*	-0.280**	-0.263*	-0.170	-0.058
Income	-0.011	-0.013	-0.015	-0.017	-0.020
Unable to work from home	-0.103**	-0.078	-0.078*	-0.064*	0.002
Unsettled Lifestyle					
Lack of relationship commitment	0.008		-0.007	-0.038	0.006
Partying	0.034		0.056	0.042	0.041
Problem drug/alcohol use	-0.057		-0.038	-0.037	-0.097
Adult Arrest	-0.120		-0.020	-0.026	0.058
Characteristics of Social Ties					
Attachment to parents	0.017			0.002	0.026
Attachment to partner	0.012			-0.012	0.015
Friends' social distancing compliance	0.308***			0.218**	0.148*
Family social distancing compliance	0.212***			0.056	-0.028
Partner pressure to comply	0.411***			0.392***	0.168
Beliefs					
Political beliefs (conservative)	-0.478***				-0.288***
Health Beliefs					
Effectiveness of social distancing	0.399***				0.105*
Altruistic motive (protect family)	0.420***				0.186***
Perception of personal risk	0.109**				0.040
Perceives age group at low risk	-0.218***				-0.045
Sociodemographic Controls					
Race/Ethnicity					
Black	0.338**	0.493***	0.495***	0.482***	0.248*
Hispanic	0.192	0.336*	0.339*	0.380**	0.177
Gender					
Female	0.277**	0.222*	0.242**	0.211*	0.075
Age	0.007	0.002	0.002	-0.010	0.016
Parent	-0.025	-0.101	-0.078	-0.076	-0.014
Constant		4.577***	4.475***	3.914***	2.970**
R^2		0.079	0.082	0.144	0.327