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**What the COVID-19 pandemic teaches about the essential practices of community
corrections and supervision**

Craig S.J. Schwalbe¹ and Deborah Koetzle²

¹Columbia University School of Social Work

²John Jay College of Criminal Justice

Author note

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Data reported in this study is available for replication and to confirm its findings. Please contact the first author with a written request to access this data.

Correspondence concerning this article should be addressed to Craig Schwalbe, Columbia University School of Social Work, 1255 Amsterdam ave., New York, NY 10027. Email:

css2109@columbia.edu

Biographical sketches

Craig Schwalbe, MSW, PhD is a Professor in the Columbia University School of Social Work. Dr.

Schwalbe's current scholarship focuses on the development of evidence-based strategies for probation-involved adolescents. He is a past recipient of the WT Grant Foundation Scholars award and led a UNICEF-funded international development effort to design and implement juvenile diversion programs for delinquent youths in Jordan.

Deborah Koetzle, PhD is an Associate Professor in the Department of Criminal Justice at John Jay College of Criminal Justice. Her research focuses on effective correctional interventions with a focus on problem-solving courts, risk/need assessment, probation practices, and international settings. Current projects include a survey of individuals living in prison in Central America about their experiences and perceptions of due process, rule of law, and life in prison.

Abstract

The COVID-19 pandemic occurred in the midst of a reform movement in probation and parole supervision in the United States. Because social distancing orders created significant disruptions in probation and parole, the pandemic provides an opportunity to explore the innovative ways that probation and parole officers adjusted their supervision strategies with clients. We surveyed probation and parole officers in the U.S. ($N = 1054$, 65% female, 66% probation) in May-June, 2020 about the supervision strategies they used with people on their caseloads before and immediately after the pandemic's onset. Data indicate that overall rates of contact did not change, but that in-person contacts were replaced with remote communication strategies. Client access to electronic communication platforms, especially video-conferencing, facilitated more frequent contact and more reliance on behavioral tactics and treatment-oriented case management approaches in the post-COVID period. Results reveal the potential role for video-conferencing as an integral element of probation and parole reform.

Keywords: Probation, Parole, Community Corrections

What the COVID-19 pandemic teaches about the essential practices of community corrections and supervision

The Covid-19 pandemic that emerged in early 2020 brought unprecedented change and disruption to all sectors of society in the United States and around the world. By April 2020, the US Federal Government issued guidelines encouraging “social distancing” and many states had “stay at home” orders, resulting in school and university closures across much of the country, office buildings shuttered with staff working remotely from home, and the closing of “non-essential services” including retail stores, movie theaters, and restaurants. With over 1.8 million confirmed cases and nearly 100,000 deaths by June 1st, 2020 (Dong & Gardner, 2020), it seemed clear that some of these changes will persist for months to come.

The criminal justice system has not been immune from the impacts of the pandemic. There is some evidence to suggest police had been advised to reduce arrests and shift policing strategies, the courts in many states closed temporarily, and community corrections generally shifted to remote and virtual supervision strategies (Buchanan et al., 2020; Jennings & Perez, 2020; Marcum, 2020; Swan et al., 2020). Given the infectious nature of Covid-19, particular attention had been paid to the spread of the disease in prisons and jails, with numerous calls for releasing low-risk and vulnerable individuals from incarceration. The Federal Coronavirus Aid, Relief, and Economic Security Act, passed into law on March 27, 2020, allocated \$100 million to the Federal Bureau of Prison for the release of individuals to home confinement, while some state and local governments took steps to accelerate release of low-risk elderly and health compromised people who were incarcerated (Abraham et al., 2020; Akiyama et al., 2020).

Because of the need for social distancing and related health implications, much of the emerging literature on the criminal justice system's response to the pandemic has focused on prisons and jails (Byrne et al., 2020). However, the impact on community corrections should not be dismissed (Viglione et al., 2020). Much like the prison population, individuals on community supervision carry a substantial burden of health problems and are disproportionately Black or Latino/a (Binswanger et al., 2011; Davis & Pacchiana, 2004; Kaeble, 2018; O'Connell et al., 2020), the very groups that have been more heavily impacted by COVID-19. Decreasing in-person contacts and treatment services provided by criminal justice and related agencies, coupled with decreasing social support and increased rates of unemployment and related economic disparities make this already vulnerable population even more so (Gonzalez et al., 2020). Though there is some sense that community supervision officers have been advised to reduce or suspend in-person reporting and arrests for technical violations, little is known about the nature of community supervision and support strategies in place during the pandemic (Marcum, 2000; Swan et al., 2020). This study seeks to explore how probation and parole officers adapted their supervision practices during the early days of the COVID-19 pandemic.

Community Corrections and Supervision Strategies

Community corrections encompasses a range of programs and services aimed at supervising and treating people in the community. The vast majority of these approaches are intended to divert people from incarceration and include diversion, problem-solving courts, day reporting, alternative to incarceration programs, and reentry programs, along with probation and parole. With over 4.5 million people under some form of community-based supervision (Kaeble & Cowhig, 2018), the nature and quality of supervision practices have significant implications for both community safety and those on supervision.

Inherent in community corrections is a tension between law enforcement and rehabilitative approaches to supervision (Klockars, 1972; Skeem & Manchak, 2008; Steiner et al., 2004). Achieving the dual goals of keeping the community safe while providing meaningful services and treatment to individuals on supervision is perhaps best viewed through the risk, need, responsivity (RNR) framework. Within this framework, individuals who are at highest risk to reoffend should receive more services and be supervised more intensely than lower risk individuals and interventions should emphasize criminogenic needs over non-criminogenic needs. Examples of criminogenic needs include increasing self-control, teaching decision-making skills and anger management, providing opportunities for education and employment, disrupting peer networks, and reducing substance using behaviors. Interventions targeting these needs should utilize behavioral and cognitive-behavioral approaches to facilitate change and should address individual barriers to success (Andrews & Bonta, 2010; Latessa et al., 2020).

Practically speaking, this means that probation and parole officers should be skilled in a number of techniques including motivational interviewing, contingency management, cognitive-behavioral approaches, case planning, and making referrals to treatment-oriented services (Armstrong et al., 2016; Gendreau & Listwan, 2018; Miller, 2014; Miller & Rollnick, 2013; Sloas et al., 2019). Each of these approaches suggest interpersonal strategies focused on collaboration, incentives, and individualized problem solving as well as a case management focus on treatment and the need for a therapeutic alliance between officer and client, all of which are considered core correctional practices (CCP; Dowden & Andrews, 2004). CCP also calls for an emphasis on effective modeling, effective use of approval and disapproval, the use of modeling and reinforcement, and using directive non-blaming forms of communication with clients to reduce recidivism and improve outcomes (see also, Trotter, 2013).

While supervision officers are increasingly expected to facilitate and support behavioral change, the literature also reflects the importance of accountability and being firm but fair when working with individuals, which requires a balance between using control versus therapeutic approaches. In a study of parole officer orientation, Papanozzi and Gendreau (2005) found that officers who use a balanced approach to supervision had significantly fewer clients revoked compared to those that took a law enforcement or social casework approach. Similarly, Kennealy et al. (2012, p. 501) found that a “firm, fair, and caring” approach helped to guard against rearrest and that this relationship held even when controlling for risk level of parolees. Miller (2015) found that community corrections officers use a blended approach to supervision, even when controlling for levels of engagement. Finally, there is evidence to suggest the same is true for youth on supervision. In a study of juvenile probation officer strategies, Schwalbe and Maschi (2009, 2011) found that officers tend to use a balanced approach to supervision and treatment, drawing on accountability, rehabilitation, and treatment equally when engaging in case management and promoting compliance, although supervision strategies depended somewhat on client characteristics like recidivism risk and compliance, and on officer characteristics like attitudes toward punishment and years of experience.

Advancing Community Corrections

Recent innovations aimed at improving community corrections have focused on officer skills and changing the nature of supervision (Phelps, 2018). For example, a number of training curricula have been designed to teach officers skills necessary for using a balanced approach to supervision and treatment. Examples include Strategic Training Initiative in Community Supervision (STICs; Bonta et al., 2011; Bonta et al., 2019), Effective Practices in Community Supervision (EPICS; Smith et al., 2012); and Staff Training Aimed at Reducing Re-arrest

(STARR; Robinson et al., 2012). These efforts have had some success at improving officer skills to balance accountability and graduated sanctions with treatment-oriented case management and counseling strategies (Bonta et al., 2011; Labrecque et al., 2013).

Beyond improving the nature of officer skills, today's reform efforts are also focused on diverting people from probation and the criminal justice altogether and changing the nature of community supervision. Proposed reforms include diverting a wider swath of people from community supervision, reducing the length of time people spend under supervision, individualizing and reducing the number of supervision conditions, minimizing the use of punitive sanctions for technical violations, and testing new strategies and interventions for supervising and treating individuals in the community, among others (Phelps, 2018; The Pew Charitable Trusts, 2020). Other reforms include kiosk reporting, which moves low risk clients to kiosk-only reporting and allows supervision officers to devote more attention to higher risk individuals without compromising public safety (Ahlin et al., 2016). Similarly, though not yet subjected to outcome evaluation, emerging approaches like dosage probation which vary the length of supervision and hours of service by risk of reoffending, appear promising (see Clark & Sankovitz, 2014). And finally, some agencies are testing the use of electronic systems of communication to reduce time spent on administrative tasks in an effort to increase time spent on case management activities (Huddleston & Jenkins, 2020).

The COVID-19 pandemic occurred during this period of advocacy and discussion about a new wave of reforms to community supervision. Following several years of concentrated efforts to reduce mass incarceration, justice scholars, policy makers, and advocates are now focused on the problem of mass surveillance of adults and adolescents under community supervision orders by the criminal justice system. The current pandemic lends urgency to this issue as the number of

people on community supervision is expected to grow. Ensuring that probation and parole are not simply a revolving door between the community and prison requires giving further consideration to how justice impacted adults and adolescents are supervised in the community. The constraints imposed by the COVID-19 pandemic provides an opportune time to explore how change and stability in community supervision practices signals an enduring commitment to a balanced approach or a retrenchment toward accountability-based practices.

Current study

The current study was conducted to provide data about how probation and parole changed in the period immediately following the onset of the COVID-19 pandemic. Probation and parole officers across the U.S. were surveyed about the type of contacts they had with individual clients they selected from their caseloads, as well as the interpersonal tactics and case management strategies they used with their chosen clients. The following research questions guided this study:

1. Did the frequency of contact, interpersonal, and case management approaches and strategies change following the onset of the COVID-19 pandemic?
2. Did COVID-19 impacts on clients and officers influence the frequency of contact, interpersonal, and case management approaches and strategies?
3. What case-level and officer-level characteristics moderated the impact of COVID-19 on contact frequency, and the frequency of interpersonal, and case management approaches and strategies?

Methods

We sent an invitation to complete an electronic survey to the email lists of two organizations that reach substantial numbers of probation and parole officers – the American

Probation and Parole Association (APPA) and the University of Cincinnati Corrections Institute (UCCI). The APPA is a professional membership organization of probation and parole officers in the U.S. It sponsors training and networking opportunities for correctional officers. The UCCI is a university-based center designed to promote evidence-based practices in correctional settings through research, program development, dissemination, and implementation. Two emails were sent to each email list. In addition, three invitations were sent to APPA members through APPA Connect, an in-house social networking platform for APPA members. The survey was open for one month from May 27 – June 24, 2020. Participation was incentivized through a raffle for gift cards delivered electronically. The survey was anonymous. All procedures were approved by the university institutional review boards of Columbia University and the John Jay College of Criminal Justice.

Sample

The sample is comprised of respondents to the APPA invitation ($n = 225$) and the UCCI invitation ($n = 1,247$) and is limited to probation and parole officers who supervise an active caseload of people who are under community supervision orders. Figure 1 shows the exclusions that result in our final sample of 1,054 probation officers and parole officers. While it is conceivable that individual officers may have entered the study through both lists, data suggest that this was a rare event. Using email addresses provided by officers to join the raffle ($n = 1,137$), only one duplicate was located. We were able to match the APPA entry with the UCCI entry using the state identifier and demographic characteristics to delete this officer's second entry.

Sixty three percent of eligible respondents completed the survey. Survey completers did not differ from non-completers across demographic categories nor in years of experience.

Participants who responded to the APPA invitation were slightly older than UCCI responders (43.8 vs. 41.4 years old, $t = 2.70$, $p = .007$) but did not differ in terms of gender, race, nor years of experience. Together, the full sample includes officers from 43 states, with five states represented in 43% of the sample (Ohio, Georgia, Illinois, Kansas, and Pennsylvania). Table 1 presents the demographic characteristics of the officers in the final sample. While it is not possible to precisely establish the representativeness of the survey sample, the sample parameters are similar to those published by Miller (2015) and by Schwalbe & Maschi (2009), two earlier surveys of APPA membership.

Measures

The electronic survey invited participants to describe their caseload characteristics, their education and experience, personal COVID-19 impacts, and supervision-related values and beliefs. It then invited participants to select an index case from their caseload using a semi-random procedure whereby participants were instructed to (1) obtain an alphabetical list of their clients, (2) insert their name into this list alphabetically, and (3) select the next person on the list who has been supervised since at least three months before COVID (Hansen & Warner, 1994; Schwalbe & Maschi, 2009). Survey participants reported on their index case characteristics, contact frequencies, and probation/parole interpersonal and case management approaches and strategies in the pre- and post-COVID-19 periods. The pre-COVID-19 period was defined as the month prior to the onset of the COVID-19 pandemic and the post-COVID-19 period was defined as the “past month,” which for all officers was well past the onset of the COVID-19 pandemic nationally. The following variables were employed in this analysis.

Supervision practices. Officers reported the contact frequency of six types of contacts (in-person, field, telephone, text messaging, video conferencing, kiosk) with the index client in

the pre- and post-COVID periods on a six-point scale ranging from less than monthly to more than once per week. Two subscales of the probation practices assessment survey (PPAS; Schwalbe & Maschi, 2011) measured interpersonal strategies, the five-item Behavioral subscale (e.g., “How often did you offer incentives,” $\alpha = .84$) and the three-item Confrontation subscale (e.g., “How often did you remind the client about the consequences of non-compliance,” $\alpha = .84$). Two PPAS subscales measured case management approaches, the five-item Treatment Orientated Case Management scale (e.g., “How often did you arrange or monitor mental health services, substance abuse services, family based services, or other treatment services,” $\alpha = .77$) and the three-item Accountability Orientated Case Management subscale (e.g., “How often did you impose jail/detention placement, home detention or electronic monitoring, curfew restrictions, or other restrictive intervention,” $\alpha = .62$). All PPAS subscales were measured on a six-point scale ranging from “infrequently” to “every contact.”

Client characteristics. Officers reported the demographic characteristics of their chosen index clients, as well as recidivism risk level (low, medium, high). Because use of actuarial risk assessment could not be assured across the study sample, officers were given no specific instructions about how to answer this question. Officers rated index client *compliance* with case plans and conditions during the pre-COVID-19 period on a scale from zero to 100%, and client access to four remote communication strategies (telephone, email, text messaging, video conferencing), and their access to a home computer and smartphone.

Officer characteristics. Officers reported on their demographic characteristics, education, and experience level and their caseload characteristics (caseload size; juvenile/adult/mixed; probation/parole; general vs. specialty). They completed one attitude question on which officers placed themselves on a continuum from lenient to punitive.

COVID-19 impacts. Officers completed two items related to COVID-19 impacts for themselves and for their index clients: a nine-item index of psychosocial impacts (job, food insecurity, loss of housing, housing insecurity, school/daycare closing, household changes, anxiety and mental health, substance abuse, medical problems; Harvey Home Connect, 2020) and a single question about whether or not they or their clients experienced a confirmed or suspected COVID-19 illness. Officers also rated their level of worry about the pandemic and the level of lifestyle change they have encountered because of the pandemic, both on five-point scales (Wesner et al., 2020).

Analysis

The study research questions were addressed using descriptive statistics and OLS multivariate regression analyses. Multivariate regression analysis predicted values of five supervision practices. A contact frequency score was calculated by summing scores on five contact frequency measures (range: 0–30; office, field, telephone, text messaging, video conferencing, and kiosk reporting) to derive post-COVID contact frequency scores. Other outcome variables include the post-COVID-19 PPAS subscale scores for Behavioral Approaches, Confrontational Approaches, Treatment-oriented Case Management, and Accountability-oriented Case Management. All multivariate models included a statistical control for pre-COVID-19 levels of their respective dependent variable (e.g., models predicting post-COVID-19 contact frequency controlled for pre-COVID-19 contact frequency). Planned interactions included COVID psychosocial impacts and suspected/confirmed COVID-19 infection with client demographic characteristics, recidivism risk level, availability of technology, and with officer attitudes and years of service. To account for the family-wise error rate arising from multiple comparisons, the p-value significance thresholds were adjusted using

Benjamini and Hochberg false discovery rate controls (FDR; Benjamini & Hochberg, 1995; Storey & Tibshirani, 2003). Unlike the Bonferroni adjustments which are overly restrictive based on the assumption of zero type I errors, FDR controls adjusts significance thresholds contingent on an a-priori assumption about an acceptable rate of type I errors (set to .05 in the present study) and contingent upon the number of comparisons embedded within a model. Original data is available by request of the first author.

Results

The participating probation and parole officers were predominantly female (65%), in their early 40's ($M = 41.8$, $SD = 10.1$), and White (77%, see Table 1). About a quarter supervised juvenile-only (26%) or mixed-age (6%) clients and two-thirds supervised probation caseloads. Caseload sizes ranged from one to 3000 ($Mdn = 55$). Index clients selected by survey participants were predominantly male (73%), adult (75%), and White (55%). African Americans were over-represented in this sample compared to the U.S. population (26.2% vs. 13.4%); clients who were reported to be Latino/a were somewhat underrepresented (10.8% vs. 18.5%; U.S. Census Bureau, n.d.). Officers rated most clients at medium risk (42%, $M = 2.2$, $SD = 4$) and the median level of case plan/condition compliance was 80% ($M = 72.6\%$, $SD = 26.3$).

Table 1 presents demographic and case information for participating probation and parole officers and index clients. According to participating officers, index clients experienced about twice the number of COVID-19 psychosocial impacts than probation and parole officers, on average (see Table 1). Nearly a third of index clients had confirmed or suspected COVID-19 infections (30%) compared to an infection rate of 13% among officers. Among officers, the most common psychosocial impact was school/day-care closure followed by COVID-19 related increases in anxiety and other mental health issues. For index clients, half were reported to have

elevated anxiety or other mental health problems associated with the COVID-19 pandemic. Furthermore, index client households experienced high rates of job loss, food insecurity, and housing insecurity, along with challenges associated with school or day-care closure. Overall psychosocial impacts among clients did not vary by race/ethnicity, with the only differences emerging in food insecurity where Black (32%) and Latino/a clients (36%) had higher rates than White clients (21%; $\chi^2 = 20.78, p < .001$). Mirroring emerging population data, Black and Latino/a clients experienced suspected or confirmed COVID-19 infections at higher rates than White clients (36%, 45%, and 23%, respectively; $\chi^2 = 29.25, p < .001$).

As shown in Table 1, the majority of index clients were reported to have access to multiple forms of communication technologies. Indeed, only 29 clients (2.8%) had neither telephone access, nor access to text messaging, email, or video conferencing. Among the 129 clients without traditional telephone access, 79% possessed a smartphone. Thus, access to remote communication technologies were ubiquitous among index clients in this study sample, and did not vary by race, gender, or risk level of clients. The only difference observed was for clients under 18 years old who had higher rates of access to video conferencing than adult clients (49% vs. 36% respectively, $\chi^2 = 13.77, p < .001$).

Table 2 presents descriptive statistics for the main outcome variables in this study. Patterns in contact frequency suggest that while specific types of contacts changed substantially from pre- to post-COVID-19, the overall frequency of contact increased, though with a very small effect size (6.4 vs. 6.7, $t = 2.43, p = .015, d = .06$). For example, in-person contacts in office and in field visits dropped precipitously, whereas rates of telephone, text messaging, and video conference calling all increased. Overall stability was also evidenced in the tactics and approaches that officers reported with their index clients, with only small decreases for

confrontational approaches, treatment-oriented case management, and accountability-oriented case management.

Multivariate models were constructed for five supervision practices. These models (full results available on request from the authors) control for pre-COVID-19 supervision practices, caseload characteristics (i.e., case load size, parole/probation, specialization), index case characteristics (i.e., age, gender, race/ethnicity, recidivism risk, pre-COVID compliance), participant characteristics (i.e., gender, race/ethnicity, years of service, education level, attitudes toward punishment), client availability of remote communication technology (text messaging, email, telephone, video conference), index client psychosocial COVID-19 impacts, and index client possible/confirmed COVID-19 infection. R^2 values ranged from .54 (predicting contact frequency), .58 (predicting the PPAS Behavioral subscale), .52 (predicting the PPAS Confrontation subscale), .63 (predicting the PPAS Treatment-oriented Case Management subscale), and .49 (predicting the PPAS Accountability-oriented Case Management subscale).

The multivariate models confirmed the overall stability in supervision practices reported by officers from the pre- to post-COVID periods. Prior contact frequency explained 68.5% of the variance in post-COVID-19 contact frequency ($\beta = .64, p < .001, \eta_p^2 = .37$); prior behavioral strategies explained 88% of the variance in post-COVID-19 behavioral strategies ($\beta = .76, p < .001, \eta_p^2 = .51$); 84% for confrontation ($\beta = .72, p < .001, \eta_p^2 = .44$); 86% for treatment ($\beta = .77, p < .001, \eta_p^2 = .55$); 83% for accountability ($\beta = .62, p < .001, \eta_p^2 = .41$).

We were particularly interested in the effect of possible/confirmed COVID-19 infection and COVID-19 psychosocial impacts on supervision practices. Possible/confirmed COVID-19 infection among index clients was associated with just one outcome accounting for less than 1% of the variance in this variable (PPAS Behavioral subscale, $\beta = -.20, p < .001, \eta_p^2 = .007$). In

contrast, COVID-19 psychosocial impacts among index clients had wide-ranging effects across all five outcomes. Figure 2 compares the conditional means for all supervision strategies for a case with client psychosocial COVID-19 impacts one standard deviation below and above the mean (.49 and 4.1 impacts, respectively), holding all covariates at their sample values. As can be seen in the figure, psychosocial impacts were associated with greater use of all supervision practices. Relative to the large proportion of variance explained by pre-COVID-19 supervision practices, effect sizes for psychosocial impacts were smaller ($\eta_p^2 = .01$ for all outcomes), however. Officer-related COVID-19 experiences (i.e., possible/confirmed COVID-19 infection, COVID-19 psychosocial impacts) were not associated with supervision practices.

Few officer and index case characteristics were associated with changes in supervision strategies from pre- to post-COVID-19. Caseload size was associated with a reduction in both contact frequency ($\beta = -.49, p < .001, \eta_p^2 = .02$) and the PPAS Treatment-oriented Case Management subscale ($\beta = -.10, p = .007, \eta_p^2 = .01$), and officer attitudes favoring punishment were associated with a reduction in the PPAS Behavioral Strategies subscale ($\beta = -.06, p = .004, \eta_p^2 = .01$) and an increase in the PPAS Accountability-oriented Case Management subscale ($\beta = .08, p < .001, \eta_p^2 = .01$). Contact frequency increased with client risk level ($\beta = .42, p = .004, \eta_p^2 = .01$) but client risk level was not associated with other supervision strategies. The availability of remote communications technology among index clients was not associated with supervision practices save one, video conferencing. Figure 3 presents the conditional means for index clients who have access to video conferencing. Access to video conferencing was associated with relatively larger increases in contact frequency ($\beta = 1.70, p < .001, \eta_p^2 = .06$), behavioral strategies ($\beta = .23, p = .002, \eta_p^2 = .01$), and Treatment-oriented Case Management ($\beta = .25, p <$

.001, $\eta_p^2 = .02$). Video conferencing was not related to Confrontational strategies nor with Accountability-oriented Case Management.

The final analyses considered interactions of client and officer variables with COVID-19 impacts (psychosocial impacts and possible or confirmed COVID-19 infection). In all, 14 interactions were tested for each supervision strategy (client age, race, gender, risk, technology; officer punishment attitudes and years of service). Across these 70 models, eight interactions achieved statistical significance using uncorrected p-values. After controlling for false discovery rates, two interactions involving client risk level remained significant: the interaction of recidivism risk and COVID-19 psychosocial impacts was a significant predictor of Behavioral Approaches ($\beta = .08, p = .002$), and the interaction of recidivism risk and possible/confirmed COVID-19 illness was a significant predictor of contact frequency ($\beta = -.74, p = .01$). At higher levels of risk, officers reported using more behavioral strategies when COVID-19 psychosocial impacts were higher, and reported fewer contacts when index clients had a possible/confirmed COVID-19 infection. Both interactions were associated with a one percent increase in variance explained.

Discussion

This study was conducted to generate data about how probation and parole officers modified their strategies and approaches with the onset of the COVID-19 pandemic. Clearly, the pandemic increased the vulnerability of an already vulnerable population. As a consequence of the pandemic, people under supervision experienced high rates of elevated mental health concerns and economic hardships, including job loss, housing insecurity, and food insecurity. Nearly one-third had a suspected or confirmed COVID-19 diagnosis, with Latino/a and Black clients bearing a disproportionate burden of infection relative to White clients. Considering that

the study was conducted at a single point in relatively close proximity to the pandemic onset, it was reasonable to expect that COVID-19 effects would be compounded over time, depending on the eventual course of the pandemic. In this context, this study sought to advance two goals – to identify how community supervision practices changed with the pandemic in the short term, and to inform probation and parole reform efforts in the long term.

The first overriding finding was the remarkable stability of the self-reported community supervision practices in the pre- to post-COVID-19 periods. Despite the enormous challenges of remote supervision during a time of high social instability and disruption, probation and parole officers increased their use of remote contact technologies to sustain a constant dosage of contact over this period. Moreover, officers reported that their use of interpersonal strategies and case management approaches was for the most part consistent across this period. Thus, similar to earlier research with juvenile probation officers (Schwalbe & Maschi, 2009), probation and parole officers in this study endorsed a style of practice consistent with the firm but fair approach advanced by Pappozzi and Gendreau (2005) and Kenneally et al. (2012), and sought to sustain these supervision practices despite the pandemic. The effect of suspected or confirmed COVID-19 infections was uneven, predicting just two outcomes (reducing behavioral strategies and increasing contact frequency for higher risk clients), whereas client psychosocial COVID-19 impacts were associated with higher rates of all supervision practices and approaches. Even so, the effect sizes for psychosocial impacts were all small relative to the large effects of continuity across time periods, suggesting widespread efforts to maintain consistency in practice during the early months of the COVID-19 pandemic.

The association of video conferencing with nearly all supervision practices suggests an intriguing role for remote supervision strategies that may transcend the COVID-19 pandemic.

Data reported here demonstrated how video conferencing, more than other remote contact technologies, can sustain contact and deliver on a needs-based, behavioral approach, even during a pandemic. While this study does not speak to the effectiveness of video conference for probation and parole outcomes, the increased use of video conferencing as part of a supervision reform strategy is worthy of further exploration. Hypothetically, video conferencing can maintain supervision dosage while at the same time reducing the footprint of supervision in people's lives compared to in-person reporting. In-person reporting requires a substantial investment of time on the part of clients owing to travel time and time in a waiting room, not to mention the disruptive impact of a supervision appointment in the structure of clients' days. Given data from the present study documenting the widespread availability of smartphones and internet connected computers among people under community supervision, video conferencing could be tested with little overhead investment for clients and agencies, and should be considered as part of a larger reform strategy.

That gender and race/ethnicity were unrelated to supervision strategies was unexpected considering our relatively large sample. We considered numerous interactions to explore how the supervision experiences of Black and Latino/a clients may differ from that of White clients, and also explored an interactional approach via an interaction between gender and race/ethnicity. Our results failed to accord with several well-regarded studies that show how implicit biases about race/ethnicity influence officers' attributions, assessments, and record keeping (Bridges & Steen, 1998; Gaarder et al., 2004; NeMoyer, et al., 2014; Smith et al., 2009). But data from the current study is consistent with studies of behavioral outcomes like supervision practices and technical violations where racial and ethnic differences have not been detected (Bechtold et al., 2015; Leiber & Peck, 2013; Schwalbe & Maschi, 2011). Given the mixed literature, how are we to

understand the results of this study? One possibility is that the behavioral manifestation of implicit biases of the type described by Bridges and Steen (1998) and others depends on aspects of the agency context in which supervision is enacted. For instance, agencies may vary to the extent to which they emphasize racial equity through training or through workforce diversity. On the other hand, it may be important to recognize that the current study, in addition to the studies previously cited, are grounded in the perspectives of probation agencies and/or officer self-report. There is a dearth of research exploring the experiences of people who are under the supervision of probation and parole programs from their own perspectives. Studies of supervision practices with these populations may yield different results.

Consistent with earlier research, client recidivism risk predicted contact frequency in expected directions, suggesting adherence to the RNR risk principle in the post-COVID-19 period. The interaction of risk with possible/confirmed COVID-19 infection makes sense in light of the need to practice social distancing and quarantining, and the interaction of risk with COVID-19 psychosocial impacts suggested that officers sought to accelerate their support of higher risk clients who presented with additional pandemic-related needs. It should be noted that the measure of risk depended on an answer to a single question and it is unknown whether participating officers recalled client risk level from an actuarial risk assessment or are making this judgment subjectively. Thus, this study was not designed to formally test how RNR informed supervision practices during a pandemic. But the apparent adherence to the risk principle provides some evidence to suggest that variations in supervision intensity by risk has become a core component of community supervision practice, rather than merely aspirational, and may ease the way for implementing reform efforts such as dosage probation.

Finally, attitudes towards punishment were related to post-COVID strategies. Those with attitudes favoring punishment reported fewer behavioral and accountability strategies during the post-COVID-19 period, controlling for pre-COVID-19 approaches. This finding is consistent with prior research showing the salience of officer attitudes for supervision practices and points to the need to address attitudes in training and in hiring (Schwalbe & Maschi, 2009; Viglione, Rudes, & Taxman, 2017).

Limitations

The generalizability of the study findings is attenuated by at least four limitations in its design and procedures in addition to the methodological issues discussed above. First and foremost, this study relied on a convenience sample of probation and parole officers from two sources that may not represent the average probation or parole officer – the American Probation and Parole Association and the University of Cincinnati Corrections Institute. We suspect that both organizations represent officers who have a heightened commitment to professionalism and exposure to evidence-based supervision practices as compared to the general population of probation and parole agencies. Moreover, data about the email lists of the APPA and UCCI are lacking, making our claims of representativeness tentative, though they are bolstered by the similarity in sampling frame characteristics of this study with others that preceded it (Miller, 2014; Schwalbe & Maschi, 2011). Second, our measure of probation practices is based on self-reported officers' perceptions of their supervision behaviors rather than their supervision behaviors directly. Their responses may be affected both by memory and by social desirability biases inherent in self-report data. Observational measures and client-reported measures may yield a different pattern of results. Third, the analysis was exploratory, involving numerous multivariate models in addition to those reported here. While we sought to minimize the risk of

spurious findings through false discovery controls, it is nevertheless possible that some of our findings, especially interaction effects, might not stand were the study to be replicated. Fourth, the timing of our study – conducted just months after states enacted and, in some cases, lifted restrictive stay-at-home orders – suffers the same weaknesses as other cross-sectional surveys. As the pandemic progresses, it is entirely possible that supervision strategies may begin to change in ways that depart from the overall levels of stability that were observed in this study.

Conclusions

With these limitations in mind, results of this study demonstrated the resilience and flexibility of probation and parole agencies that enabled officers to sustain supervision levels and practices even under the highly restrictive conditions initially imposed by the COVID-19 pandemic. Officers were responsive to the impacts that the pandemic wrought on client lives. And the study featured the emergence of video conferencing as a critical resource. To support probation and parole agencies as they continue to contend with disruptions caused by the pandemic, and into the future as probation and parole reform movements continue, future research is needed in at least three areas: to explore how agency policy and context affects stability and change in supervision practices, to describe how supervision practices evolve longitudinally over the course of the pandemic, and to identify and evaluate best practices for the integration of video conferencing into routine community supervision.

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Table 1

Sample characteristics and characteristics of index clients

		Officer	Index client
Age (<i>M, SD</i>)		41.8 (10.1)	30.9 (13.2)
	Less than 18 yrs old (%)	-	24.8%
Gender	Female	64.5%	26.8%
	Male	34.5%	72.6%
	Non-binary	.3%	.6%
	Non-response	.7%	-
Race/ethnicity	White (%)	76.9%	55.2%
	Black (%)	10.9%	26.2%
	Latino/a (%)	6.5%	10.8%
	Other (%)	5.7%	8.8%
Recidivism risk (1 = low risk, 3 = high risk; <i>M, SD</i>)		-	2.2 (.74)
Pre-COVID-19 compliance (<i>M, SD</i>)		-	72.6 (26.3)
Education/experience	Master's degree (%)	27.5%	-
	Years of experience (<i>M, SD</i>)	3.9 (1.3)	-
Caseload	Juvenile (%)	31.3%	-
	Parole (%)	33.8%	-
	Size (<i>M, SD</i>)	85.5 (135.0)	-
	General (%)	67.6%	-
	Intensive supervision (%)	13.8%	-
	Sex offending (%)	8.2%	-

	Other specializations (%)	10.5%	-
COVID Impacts	Total (<i>M, SD</i>)	1.2 (1.13)	2.3 (1.81)
	Job loss (%)	11.4%	39.2%
	Food insecurity (%)	6.1%	25.5%
	Lost housing (%)	0.2%	7.6%
	Behind in rent/mort. (%)	4.3%	25.5%
	School/daycare close (%)	45.6%	34.5%
	Moved in/ moved out (%)	7.1%	13.7%
	Anxiety or mental health (%)	38.3%	50.9%
	Emergency medical (%)	2.5%	7.8%
	Drug/alcohol use (%)	8.9%	28.6%
	Confirmed or possible COVID (%)	13.4%	29.7%
Tech availability	Home computer w/ internet (%)	-	41.6%
	Smartphone (%)	-	70.2%
	Text messaging (%)	-	84.7%
	Email (%)	-	68.0%
	Telephone (%)	-	87.7%
	Video conference (%)	-	39.3%

Note. Index clients were chosen from participant caseloads using pseudo random procedures described in the survey.

Table 2

Contact frequency and PPAS subscale scores

	Pre-COVID	Post-COVID	
Contact frequency			
Overall average	6.4 (4.08)	6.7 (4.48)	$t = 2.44^* d = .06$
In-person office	2.0 (1.35)	.6 (1.11)	$t = 29.25^{***} d = 1.09$
In-person field	1.6 (1.37)	.5 (1.01)	$t = 22.02^{***} d = .83$
Telephone	1.8 (1.32)	2.8 (1.51)	$t = 21.69^{***} d = .77$
Text messaging	1.2 (1.53)	2.0 (1.86)	$t = 16.26^{***} d = .45$
Video conference	.1 (.45)	1.0 (1.45)	$t = 17.91^{***} d = .77$
Kiosk	.1 (.53)	.1 (.46)	$t = 1.56 d = .05$
PPAS			
Behavioral approach	3.6 (1.48)	3.4 (1.58)	$t = 3.39^{***} d = .08$
Confrontational approach	3.1 (2.13)	2.7 (2.26)	$t = 7.83^{***} d = .19$
Treatment case management	2.8 (1.47)	2.4 (1.52)	$t = 11.56 d = .24$

Accountability case management 2.4 (1.51) 2.0 (1.46) $t = 11.12^{***}$ $d =$
.29

Figure 1

Sample exclusions

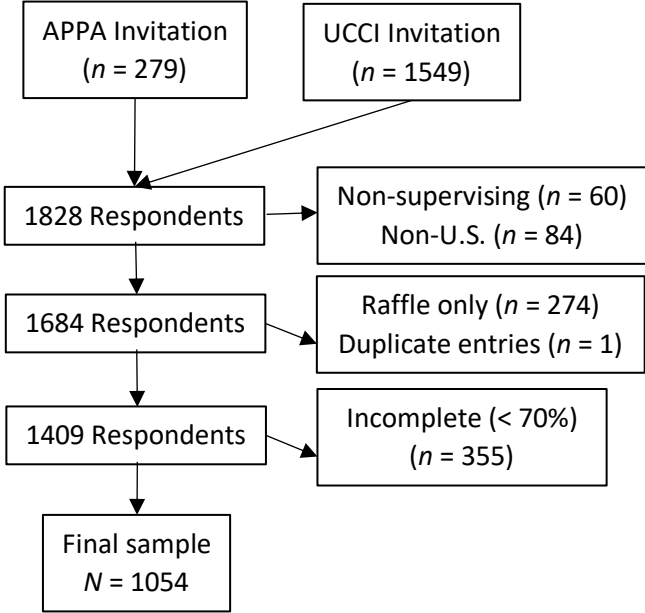
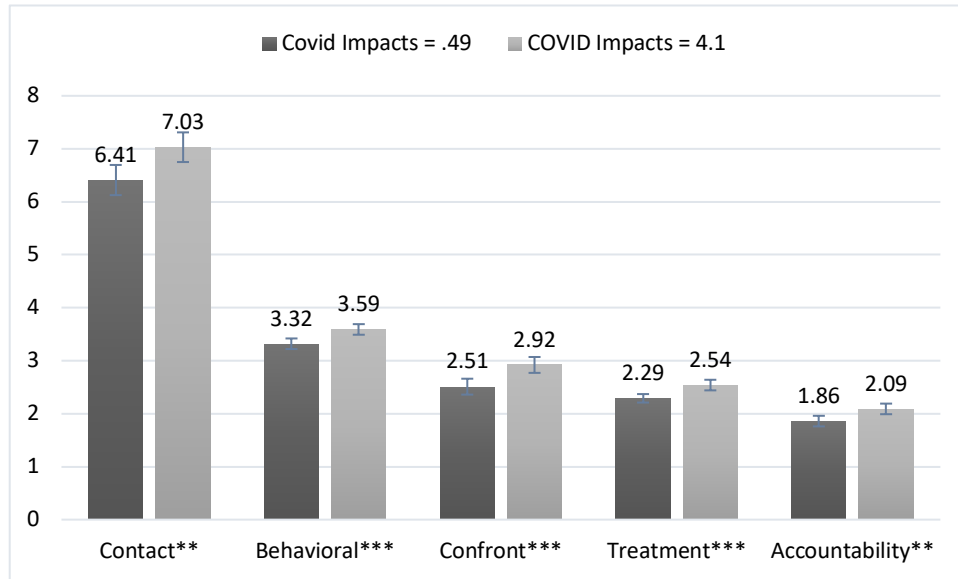


Figure 2

Model predicted contact frequency and PPAS subscale scores by psychosocial COVID impacts

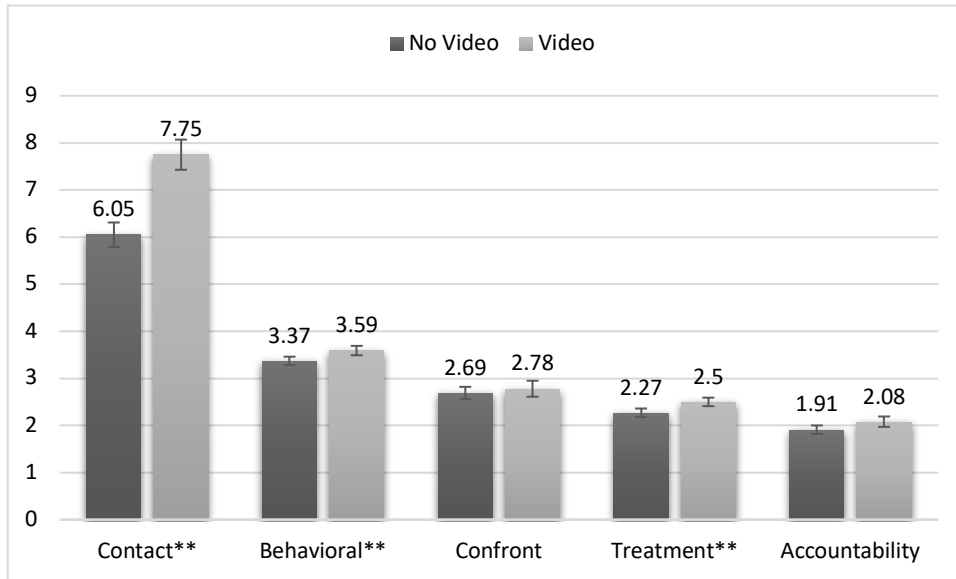


** $p < .01$; *** $p < .001$

Note. Psychosocial COVID impacts modeled at one *SD* below (.49) and one *SD* above the mean (4.1).

Figure 3

Model predicted contact frequency and PPAS subscale scores by client access to video conferencing



** $p < .01$