

The Living Laboratory Studies: Providing Insights into Community Supervision Practices¹

Guy Bourgon
Tanya Rugge
Nicholas Chadwick
Public Safety Canada
James Bonta
Consultant

THE RISK-NEED-RESPONSIVITY (RNR) MODEL is one of the major paradigms for understanding offender rehabilitation (Cullen, 2013; Polaschek, 2012). First formulated with four principles to describe the necessary ingredients for effective treatment (Andrews, Bonta, & Hoge, 1990) the model has since been expanded to 15 principles (Bonta & Andrews, 2017). Three of the original principles remain at the core of the RNR model. In order to reduce recidivism, treatment should follow the Risk principle and match the intensity of intervention to the risk level of the offender. Treatment should also attend to the Need principle by targeting criminogenic needs (e.g., procriminal attitudes and

thinking, substance abuse) and deliver the treatment in accordance with the Responsivity principle (e.g., use cognitive-behavioral techniques to influence offender change). Support for these principles is found in a variety of meta-analytic reviews of the offender rehabilitation literature (Andrews, Zinger, Hoge, Bonta, Gendreau, & Cullen, 1990; Bonta & Andrews, 2017; Koehler, 2013) and also with specific offender subpopulations (substance abusers, Gutierrez & Bourgon, 2012; sex offenders, Hanson, Bourgon, Helmus, & Hodgson, 2009; youth, Koehler, Lösel, Akoensi, & Humphreys, 2013).

What Do Probation and Parole Officers Actually Do with their Clients?

Probationers and parolees account for the majority of correctional populations among Western industrialized countries. As examples, in the U.S., in 2014, 69 percent of the offender population (an astounding 4.7 million) were under community supervision (Kaeble, Glaze, Tsoutis, & Minton, 2016). In Canada, 71 percent were on probation or parole (Public Safety Canada, 2016); for Australia, it was 63 percent (Australian Bureau of Statistics, 2016); while in England and Wales it was as low as 56 percent of the offender population (Ministry of Justice, 2014). Despite the prevalence of community supervision, relatively little is known of the daily activities of probation and

parole officers and the organizational supports for these activities.

Since the 1990s, the American Probation and Parole Association has grappled with the question of the ideal caseload size (number of offenders per officer). Considering caseload size depends on a variety of factors, the most important being agency staffing resources; how many staff an agency has will dictate caseload size. Agencies can also vary the number of offenders assigned to an officer according to the risk of the offender. Intensive probation services (ISP) are intended to reduce the caseloads of designated officers so they can devote more time and resources to higher risk cases and presumably be more effective in reducing recidivism. This seems like common sense, but the evaluation research suggests otherwise. Petersilia's (1999) evaluation of ISPs found neither reduced recidivism nor an increase in the time and resources that officers gave to their clients. However, ISPs have been found effective when the smaller caseloads were combined with appropriate treatment services or assigned to staff with some training in the RNR model (Gendreau, Cullen, & Bonta, 1994; Jalbert & Rhodes, 2012; Paparozzi & Gendreau, 2005).

Counting What Is Important

The problem with caseload analysis is that it tells us little about what probation officers (POs; our use of the term POs also includes

¹ The views expressed are those of the authors and do not necessarily represent the views of Public Safety Canada. Correspondence concerning this report should be addressed to Guy Bourgon or Tanya Rugge, Research Division, Public Safety Canada, 340 Laurier Avenue West, Ottawa, Ontario, Canada, K1A 0P8; email: Guy.Bourgon@Canada.ca or Tanya.Rugge@Canada.ca. This report would not have been possible without the support of Senior Officials in Alberta, Kim Sanderson, Shawn Rainault and Rav Bains, who agreed with the importance of this project and allowed the study to occur. Recognition and appreciation are given to the 21 probation officers who agreed to participate, giving their time to complete the documentation and for engaging their clients. Lastly, a special thanks to Richelle Budd, who used her exceptional organizational skills to oversee the data collection in Alberta.

parole officers) actually do with their clients. Caseload considerations are highly dependent on the workload activities and the time it takes for each case (Burrell, 2006; DeMichele, Payne, & Matz, 2011), but even workload studies have serious limitations. Typically, workload analyses for caseload calculations are in the aggregate and not at the individual level. That is, offenders are seen more or less as requiring the same resources and attention and the controlling parameters are the number of available POs in an office and the number of offenders assigned to that office. Moreover, there are surprisingly few empirical, systematic studies of POs' work with their clients that are related to *effective* supervision. That is, what do we know about POs' adherence to the RNR model and its "what works" principles? Papparozi and DeMichele (2008, p. 281) summarized the state of knowledge a decade ago as follows:

Within probation and parole agencies themselves, virtually all management information systems and employee performance assessments capture data reflecting how busy an agency and its staff are rather than how effective they are...data collection focuses on cataloging the numbers of contacts made (with and without the offender), number of hours spent in the office versus the field, number of reports submitted, number of revocations, etc. What is missing ... is information about how much safer the public is across time, increases/decreases in absconder rates, rates of employment for unemployed but employable individuals under supervision, rates of drug programme completion for drug addicts, and recidivism rates for probation and parole agencies when compared to the available alternatives.

Turning the Magnifying Glass on PO Activities

There have been at least five approaches examining PO activities and interactions with their clients, with the later four methodologies in particular used to evaluate PO adherence to RNR. The first is the use of written diaries. Diaries have been widely used in the study of deviant and criminal behavior, but completed mostly by the deviant actor/offender (e.g., counting sexually deviant urges or drug use). The few studies of written diaries with

POs expose the difficulties in asking POs to complete diaries when they already complain of the paperwork associated with their duties. For example, even with the sponsorship of the European Cooperation in Science and Technology, only 14 officers from five countries completed diaries of their activities related to the supervision of probationers (Rokkan, Phillips, Lulei, Poledna, & Kensey, 2015).

DeMichele and Payne (2018) used an innovative, web-based diary method to measure the number of minutes spent on tasks related to offender supervision. Their study was considerably larger than the pilot research of Rokkan and his colleagues (2015). Probation officers from 24 U.S. counties completed anonymously an online form on 104 tasks (e.g., risk assessment, face-to-face contact, home visit), the time spent on the task, *and* the risk level of the probationer.² Thus, the researchers were able to assess probation officer adherence to the risk principle. The length of face-to-face contact did not vary across risk levels. However, when the range of tasks and type of offender (e.g., race, sexual offender) were considered in a regression analysis and compared to unsupervised offenders (which may be a debatable comparison to use), they did find that POs devoted more time to higher risk offenders.

In recent years there has been increasing attention to PO behavior as it relates to the RNR principles especially within the context of training POs in effective supervision practices. An early example is Trotter's (1996) work that used case file reviews to assess PO behavior. Trotter (1996) provided five days of training to 30 POs in prosocial modeling and problem solving (responsivity principle). Subsequently case notes were reviewed and recidivism outcomes measured. The file reviews found that 12 officers continued to use the skills taught in training and 18 reverted to their usual methods of supervision. The clients of the probation officers who showed evidence of prosocial modeling and problem solving had a four-year recidivism rate of 53.8 percent³ compared to 64 percent

for the clients who were supervised as usual. That is, following at least to some extent the RNR model in community supervision was associated with reduced recidivism.

In addition to file reviews and diaries there are three other, and more direct, methods to assess how well POs follow the RNR model. For example, Raynor and his colleagues (Raynor, Ugwu-dike, & Vanstone, 2014; Raynor, Ugwu-dike, Vanstone, & Machon, 2012) analyzed 85 video-recorded interviews between 10 probation officers and 75 of their clients from the British Channel Island of Jersey. The recordings were based on the first interview and were coded and rated on nine skill clusters (e.g., motivational interviewing, cognitive restructuring). There was sufficient variability in the scores on skills that the POs could be grouped into low and high skill levels. The two-year reconviction rate was 53 percent for clients of POs who scored lower on their interview skills. For POs who scored higher, the reconviction rate of their clients was 31 percent.

To our knowledge, Trotter and Evans (2012) have conducted the only personal observation study of PO behavior with their clients. Three researchers sat in and rated 119 officer interviews with juvenile probationers (aged 12 to 18 years). All the interviews took place within the first three months of supervision. Observations were coded along a five-point scale (1 = not present to 5 = present throughout the interview). Despite being given training in Trotter's (1996) prosocial modeling and problem-solving program, some aspects of the training were infrequently used (e.g., role clarification, problem-solving). Some other taught skills were observed more frequently (e.g., prosocial modeling and reinforcement, being open and honest). Unfortunately, Trotter and Evans (2012) did not examine the potential relationships between these skills and recidivism.

Finally, audio recording the interviews of POs with their clients has been the most frequently applied methodology to understand effective probation practices. The methodology was first pioneered by Andrews, Kiessling, Russell, and Grant (1979) but does not reappear in the literature until 2008. Bonta, Ruge, Scott, Bourgon, and Yessine (2008) audio recorded the sessions of 62 probation officers with their clients over a six-month period, which at that point was the most comprehensive examination of PO adherence

² DeMichele and Payne (2018) do not report the number of probation officers who responded to their web-based diary survey as "our research design focused on tasks completed, not the individual" (p. 45).

³ In Trotter's (1996) Table 1, page 38, the recidivism rate for clients of probation officers who used the model was reported as 46 percent. However, the number of clients who committed a further offense was reported as 50. The total number of probationers was 93. Therefore, we calculated the recidivism

rate as 53.8 percent (50/93).

to the RNR model. They found relatively poor adherence to the risk principle, mixed adherence to targeting criminogenic needs, and almost nonexistent adherence to the structuring component of the responsibility principle (the relationship component was more frequently observed). Based on these findings and along with the results from other studies, Bonta and his colleagues set out to train POs specifically on RNR-based skills that went beyond Trotter's (1996) prosocial and problem-solving training protocol.

The Strategic Training Initiative in Community Supervision (STICS) involves three to four days of training in RNR-based supervision practices with ongoing trainings and clinical supports. In an experimental evaluation, STICS-trained POs were more likely to evidence changes in adherence to the RNR principles as measured by audio recordings of supervision sessions. The STICS officers spent more time on the criminogenic needs of their clients and were more likely to use cognitive-behavioral intervention techniques compared to the control POs (Bonta, Bourgon, Ruge, Scott, Yessine, Gutierrez, & Li, 2011). In addition, the probationers of the trained officers (95 percent of whom were medium- to high-risk offenders) demonstrated lower two-year reconviction rates (25 percent) than the control clients (39.5 percent).

Following STICS, two similar RNR-based training programs were developed and evaluated. Both used audio recordings to measure changes in PO behaviors. The first is STARR (Staff Training Aimed at Reducing Rearrest). STARR was developed by the U.S. federal probation system and experimentally evaluated. The findings from the evaluations showed changes in officer behavior in the desired direction and also reduced recidivism for the probationers of STARR-trained POs (Lowenkamp, Holsinger, Robinson, & Alexander, 2012; Robinson, Lowenkamp, Holsinger, VanBenschoten, Alexander, & Oleson, 2012; Robinson, VanBenschoten, Alexander, & Lowenkamp, 2011). The second training program, developed by researchers at the University of Cincinnati, is EPICS (Effective Practices in Community Supervision). There have been two non-experimental evaluations of EPICS (Labrecque, Schweitzer, & Smith, 2013; Smith, Schweitzer, Labrecque, & Latessa, 2012), neither of which presented recidivism outcomes, and one randomized experiment with recidivism data (Latessa, Smith, Schweitzer, & Labrecque, 2013). The three evaluations showed the

EPICS officers were more likely to engage in RNR-based skills after training, but the recidivism outcome was equivocal. Reduced recidivism was observed only for the clients supervised by POs described as "high fidelity" (i.e., proficient in EPICS-trained skills). These results demonstrate the aggregate effect of PO in-session behavior; they do not take into account all the other PO activities that are part of supervision.

Living Laboratory

The previously reviewed studies reflect a growing interest and sophistication in the analysis of PO activities. However, PO behavior cannot be considered in isolation of organization context. PO practices are dependent upon an agency's organizational climate, values, policies, and managerial support for their behaviors. The concept of a "Living Laboratory" was developed in the mid-1990s by D. A. Andrews and James Bonta in collaboration with the U.S. National Institute of Corrections and a U.S. Midwest county probation department. The idea was to choose a probation agency that would pilot new corrections initiatives on a small scale before widespread implementation. The goals would be to examine the impacts of a new initiative on clients and staff and also on the organization itself. It was hypothesized that any new program introduced into a correctional organization would exert changes on all aspects of the agency (staff, policy, and practice). Some of the changes could represent barriers to implementation, and this Living Laboratory would not only identify the barriers but provide an opportunity to develop solutions prior to larger implementation. In other words, deal with potential problems on a small scale before they develop into big problems.

Unfortunately, due to a number of unforeseen circumstances, the Living Laboratory idea was never implemented in the U.S. However, the promise of STICS to improve community supervision practices seized the attention of two Canadian provinces that wished to implement STICS across their respective jurisdictions. Thus, researchers at Public Safety Canada engaged the two provinces in conducting a Living Laboratory study prior to implementing a province-wide rollout of STICS. We describe the study conducted at these two sites in this paper. The first was conducted in one large probation office in western Canada (Agency 1), and the second study was conducted in four offices from a large province in eastern Canada (Agency 2).

Methodology

Two separate Canadian correctional agencies, each with its own policies, procedures, and supervision practices participated in the study. There were 21 probation officers (POs) who participated from Agency 1 and 34 from Agency 2. Each PO was asked to submit data on 8 randomly selected clients over a 90-day period. Two of the clients were newly assigned cases. The remaining six clients were randomly selected from the officer's caseload and were between 3 and 6 months in their supervision period. All clients needed to provide their consent to participate, and once consent was granted, the following data was collected:

1. *Client Initiation Documentation*: This package consisted of basic client demographic information, as well as risk and need assessment information. In Agency 1, the Service Planning Instrument (SPI; Orbis Partners, 2003) was used and results classify clients into one of three risk levels (Low, Moderate, and High). In Agency 2, it was the Level of Service—OR (LSI-OR; Andrews, Bonta, & Wormith, 1995), which classifies clients into one of five risk levels (Very Low, Low, Medium, High, and Very High).
2. *Time Tracking Documentation*: This form, completed by the officer for each individual client, tracked the activities and time spent supervising that client for the 90-day data collection period. There were three broad categories of tasks: (1) the time they spent in face-to-face supervision (F2F), (2) the time spent in indirect contacts with clients (NONF2F; e.g., phone conversation or listening to a voicemail from the client), and (3) time spent in a variety of other activities that did not directly involve the client (i.e., documenting/inputting client information, collateral contacts, reviewing case notes, and out of office activities).
3. *Trimonthly Checklist*: This checklist, completed by the officer for each individual client at the end of the data collection period, recorded referrals to and engagement in community programs and resources targeting various needs over the data collection period.

Results

Probation Officer Demographics

Of the 21 POs who participated in the study in Agency 1, a total of 15 (71.4 percent) provided personal demographic characteristics and 6 remained anonymous. Most were female (86.6

percent), with an average age of 29.3 years ($SD = 5.01$). Years of experience as a PO varied, ranging from 1 year to 25 years, with an average of 7.03 years ($SD = 6.2$). Almost half ($n = 7$) of the officers indicated that they specialized in certain types of cases, including supervising domestic violence clients, sexual offenders, and drug court clients.

Of the 34 participating POs in Agency 2, only 22 (64.7 percent) provided personal demographics. Over half (59.1 percent) of the officers were female and the average age was 38.2 ($SD = 10.0$). The level of experience ranged from 1.5 to over 30 years, with an average of 10.7 years ($SD = 9.5$). One quarter (25 percent) of the officers indicated that they handle specialized caseloads, primarily clients under intensive supervision.

Client Data

From Agency 1, information was collected on 95 clients, with 85 completed client initiation forms, 82 with risk assessment information. Time tracking documentation was completed for all 95 clients, and 68 Tri-Monthly Checklists were submitted. From Agency 2, there were 234 client initiation forms completed; 219 with risk assessment information. There was time tracking information on 230 clients and 70 completed Tri-Monthly Checklists. Client demographics and risk assessment results for the two samples are found in Table 1 (page 11). The two samples were similar in most demographic characteristics and risk profile. However, there were more clients who were single (never married) and Indigenous in Agency 1. The latter finding is not surprising, given that Agency 1 was located in western Canada where Indigenous populations are higher. Risk profiles were very similar, as can be seen when the five risk levels of Agency 2 are collapsed to three levels (i.e., 23.2 percent vs. 25.1 percent low risk, 45.1 percent vs. 40.6 percent moderate/medium risk, and 31.7 percent vs. 34.2 percent high risk).

Officer Monthly Workload

In order to understand officer workload, we decided to standardize the frequency and duration of time for all tracked activities over a one-month period (30 days) as the total amount of days tracked varied for each client. Activities included Client Contact (i.e., F2F and NonF2F) and Administrative Activities (i.e., Documenting Information, Collateral Contact, and Case Review). The monthly frequency of activities was calculated by dividing the total number of times that activity

happened by the total number of days of the tracking period. That result (i.e., frequency per day) was multiplied by 30 to obtain the frequency of that activity for any given month. For duration of time spent on each activity, the total amount of time engaged in that activity over the entire tracking period was divided by the total number of days tracked. That result (i.e., amount of time per day) was multiplied by 30 to obtain the duration of time in minutes engaged in that activity over a one-month period. To ensure that very short tracking periods did not artificially inflate or deflate these standardized measures, only data for specific clients that were tracked for a minimum of two weeks (i.e., 14 days) were included.

Agency 1

Time tracking data information was excluded for 6 of the 95 clients that did not have the minimum 14 days. Risk information was not available for an additional six clients; leaving data on 83 clients for analysis. A series of ANOVAs were conducted to compare three risk levels on the monthly frequencies and duration (Table 2, page 11). Significant differences were found on monthly frequencies of F2F contact ($F(2,80) = 3.62$; $p = .03$), but no other significant differences on the other measures were found. Follow-up pairwise comparisons (Scheffe pairwise comparisons with $p < .05$) on frequency of F2F contacts found High Risk clients ($M = 2.14$) had significantly more contacts per month than Low Risk clients ($M = 1.37$). The frequency of monthly contact between Low Risk and Medium Risk and between Medium Risk and High Risk were not significantly different.

Agency 2

Data was excluded for 12 of the 230 clients due to not having at least 14 days of tracking information. Risk information was not available for an additional 17 clients; leaving data on 201 clients for analysis. ANOVA comparing five risk levels on the monthly frequencies and duration (Table 4, page 12) revealed a number of significant differences. Significant differences were noted on the frequency ($F(4,196) = 2.98$; $p = .02$) and duration ($F(4,196) = 3.85$; $p = .01$) of Client Contact as well as the duration of monthly F2F contact ($F(4,196) = 3.02$; $p = .02$). Follow-up pairwise comparisons for Client Contact found significant differences between the Low Risk clients and Very High Risk clients on frequency ($M = 1.7$ vs. $M = 2.8$) and duration ($M = 32.2$ vs. $M = 63.5$). Pairwise

comparisons of the duration of F2F Contact indicated that Low Risk clients had significantly less time than Very High Risk clients ($M = 28.7$ vs. $M = 52.4$). No other significant differences between risk levels were noted.

ANOVA revealed significant differences on the frequency ($F(4,196) = 7.53$; $p < .01$) and duration ($F(4,196) = 9.43$; $p < .01$) of Administrative Activities; the frequency ($F(4,196) = 8.08$; $p < .01$) and duration ($F(4,196) = 6.61$; $p < .01$) of Documenting Information; the frequency ($F(4,196) = 9.22$; $p < .01$) and duration ($F(4,196) = 8.05$; $p < .01$) of Collateral Contacts; and the duration ($F(4,196) = 4.83$; $p < .01$) of Case Review.

In terms of Administrative Activities, follow-up pairwise comparisons found significant differences on frequency of Administrative Activities, with Low Risk clients ($M = 3.8$) having significantly fewer than High Risk clients ($M = 6.4$) and Very High Risk clients ($M = 8.9$). Medium Risk clients had significantly fewer ($M = 5.4$) Administrative Activities than Very High Risk clients ($M = 8.9$). In terms of the duration of Administrative Activities, officers spent significantly more time per month on Very High Risk clients ($M = 151.8$) compared to all other groups ($M = 59.7$ vs. $M = 35.0$ vs. $M = 56.0$ vs. $M = 73.6$ for Very Low Risk, Low Risk, Medium Risk, and High Risk respectively).

Follow-up comparisons on Documenting found officers spent significantly more time and did so more frequently for Very High Risk clients ($M = 86.1$ and $M = 5.2$ respectively) than Low Risk clients ($M = 26.0$ and $M = 2.5$) and Medium Risk clients ($M = 38.9$ and $M = 3.3$). In addition, officers documented significantly fewer times per month for Low Risk clients ($M = 2.5$) compared to High Risk clients ($M = 6.4$).

Follow-up comparisons on Collateral Contacts found officers had significantly more contacts with collaterals and spent more time doing so for Very High Risk clients ($M = 2.5$ and $M = 48.2$) compared to all other groups (Very Low Risk ($M = 0.8$ and 5.2); Low Risk ($M = 0.5$ and 3.5); Medium Risk ($M = 1.0$ and 9.7); and High Risk ($M = 1.3$ and 14.1)). No other significant between-group differences on Collateral Contact were noted. The same pattern was found in follow-up pairwise comparisons for duration of Case Review; that is, significantly more time per month was spent reviewing case information of Very High Risk clients ($M = 17.5$) compared to Very Low Risk ($M = 5.7$), Low Risk ($M = 5.5$), Medium Risk ($M = 7.3$) and High Risk ($M = 7.8$) clients.

Individual Face-to-Face (F2F) supervision sessions: Policy, Assignment, and Practice

Agency 1

For Agency 1, the frequency with which a PO is required to see clients is explicitly spelled out in policy, which is based on risk: once per month for Low Risk clients, twice per month for Moderate Risk clients, and three or more times per month for High Risk clients. However, results indicated the assigned reporting schedule did not align with policy. Only 40 percent of Low Risk clients were given reporting schedules in concordance with policy (once per month), 71.6 percent of Moderate Risk clients had been assigned reporting schedules in concordance with policy (twice per month), whereas 96 percent of High Risk clients were assigned reporting schedules in concordance with policy (three or more times per month).

Assigned schedule is not the same as actual reporting. To illustrate how many days passed between in-person reporting, we converted the average monthly F2F Contact for the three risk levels and found that Low Risk clients reported in person to their PO once every 21.9 days, Moderate Risk clients reported in person once every 16.9 days, and High Risk clients reported in person once every 14.0 days.

In terms of the duration on individual F2F supervision sessions, officers from Agency 1 recorded time for 264 F2F supervision sessions. The average duration of a session was 23.3 minutes ($SD = 16.4$) ranging from 1 minute to 2 hours. The majority (57.6 percent) of F2F supervision sessions lasted between 15 and 30 minutes, with 23.1 percent of the sessions shorter than 15 minutes and 19.1 percent of the sessions longer than 30 minutes. The duration of F2F supervision sessions was significant, but negatively related to risk ($r = -.16; p < .01$). Specifically, F2F supervision sessions lasted longest for Low Risk clients ($M = 28.0$ minutes; $SD = 23.4$) and shortest for High Risk clients ($M = 20.7$; $SD = 14.5$). Moderate risk clients had an average F2F supervision session duration of 24.1 minutes ($SD = 14.2$).

Agency 2

For Agency 2, policy does not dictate specific contact standards based on risk. Rather the officer determines the frequency of reporting based on legal requirements of the sentence (none of the 234 sentences had an explicit frequency of reporting); seriousness of the offense(s); assessed risk, needs,

and motivation to benefit from intervention; stream placement and availability of program; specialized case policies; and the risk principle (with the most intense reserved for those who represent greatest risk). Over three-quarters (77.6 percent) of the clients were assigned a reporting schedule of once per month, with most of the remaining clients (20.6 percent) assigned a reporting schedule of twice per month. Very few (1.8 percent) clients had an assigned reporting schedule of three or more times per month. Risk level was significantly associated with assigned reporting levels ($r = .32; p < .01$); however, there was little variation across risk levels. Once per month reporting was the majority for Very Low (80.0 percent), Low (91.9 percent), Medium (83.9 percent), and High (66.7 percent) Risk clients. For Very High Risk clients, although the most frequent reporting schedule was twice per month (43.5 percent), almost as many were assigned reporting schedules of once per month (39.1 percent). A minority (17.4 percent) were given a reporting schedule of three or more times per month.

To illustrate how many days passed between in-person reporting, the average monthly F2F Contact for the five risk levels was converted, as we had done for Agency 1, with a range of once every 16.7 to 25 days across the risk levels. Very Low Risk clients reported in person to their PO once every 18.8 days, Low Risk once every 25.0 days, Medium Risk once every 21.4 days, High Risk clients once every 21.4 days, and Very High Risk clients once every 16.7 days. The correlations between risk level and the frequency of F2F contact was not significant ($r = .12; p = .08$).

In terms of the duration of individual F2F supervision sessions, officers from Agency 2 recorded time for 702 F2F supervision sessions. The average amount of time in F2F sessions was 25.5 minutes ($SD = 13.1$), ranging from 1 minute to 2 hours. The majority (70.1 percent) of F2F supervision sessions lasted between 15 and 30 minutes, 10.7 percent were shorter than 15 minutes, and 19.2 percent were longer than 30 minutes. The average duration of F2F supervision sessions was 23.8 minutes ($SD = 14.4$) for Very Low Risk clients, 23.7 minutes ($SD = 10.4$) for Low Risk clients, 25.6 minutes ($SD = 12.9$) for Medium Risk clients, 25.4 minutes ($SD = 13.9$) for High Risk clients, and the longest for Very High Risk clients, with an average of 28.6 minutes ($SD = 14.2$). For Agency 2 (with no specific contact standards policy), risk was significantly, but minimally, related to the F2F session length (r

$= .10; p = .01$), indicating longer F2F sessions as risk increased, contrary to the findings for Agency 1. However, the ANOVA results for session duration by risk level found no significant differences ($F(4, 697) = 2.12; p = .08$).

Engagement in Programs and Services

Agency 1

Data from the *Trimonthly Checklist* was available for 68 clients with risk information from Agency 1 (Table 4, page 12). Overall, 64.7 percent ($n = 44$) of the clients were participating in at least one program or service to address various needs, with 20 percent of clients participating in two or more. Risk level was significantly related to the total number of programs and services ($r = .35; p < .01$), indicating that as risk increased, so did the number of services and programs.

About half (51.5 percent; $n = 35$) of the clients were participating in programs or services targeting criminogenic needs. The most frequent criminogenic programs were those that targeted substance abuse ($n = 20$) and those targeting antisociality/aggression ($n = 15$; these programs could target antisocial personality, procriminal attitudes, and/or aggression, including family violence). Surprisingly, risk was not significantly related to the number of criminogenic need-targeted programs and services ($r = .17; p = .17$).

Of the 35 clients participating in a criminogenic targeted program, 28.6 percent ($n = 10$) had only minimal participation (only one or two sessions attended), 45.7 percent ($n = 16$) had moderate participation (i.e., more than 2 sessions, but may have had sporadic attendance and/or not completed a minimum of 50 percent of the program/service to date), and 25.7 percent ($n = 9$) had a high degree of participation (i.e., consistent attendance over a minimum of one month and/or completed a minimum of 50 percent of the program/service). Although risk was not significantly related to level of participation in criminogenic need programming ($r = -.21; p = .25$), the relationship was negative, indicating that as risk increased, participation tended to decrease.

About a third (31 percent; $n = 21$) of clients were involved in a program or service targeting daily living needs (i.e., accommodation, finances, mental health), with the majority (18 of the 21 clients) involved in mental health services. Risk level was related to the total number of services and programs addressing daily living issues ($r = .36; p < .01$). Of the 21 clients participating in a program, 14.3 percent

($n = 3$) had only minimal participation, 47.6 percent ($n = 10$) had moderate participation, and 38.1 percent ($n = 8$) had a high degree of participation. Although risk was not significantly related to the level of participation in daily living needs programming ($r = -.18$; $p = .44$), the relationship was negative, indicating that as risk increased, participation tended to decrease.

Agency 2

Data from the *Trimonthly Checklist* was available for 66 clients from Agency 2 (Table 4, page 12). There were 65.2 percent of clients participating in at least one program or service to address various needs, 45.5 percent participating in one program, and 15.2 percent of clients involved in two or more. Risk level was unrelated to the total number of programs and services ($r = .08$; $p = .52$).

For programs or services targeting criminogenic needs, 60.6 percent of the clients were recorded as being involved in at least one program. The most frequent criminogenic programs were those that targeted substance abuse and anti-sociality/aggression. Surprisingly, risk was not significantly related to the number of criminogenic need-targeted programs ($r = .15$; $p = .24$). Of these 40 clients participating in a criminogenic-targeted program, 25.0 percent had only minimal participation, 22.5 percent had moderate participation, and 52.5 percent had a high degree of participation. Risk was significantly and negatively related to level of participation in criminogenic-need programming ($r = -.34$; $p = .03$). That is, as risk increased, participation levels decreased.

Only four clients (6.1 percent) were involved in a program or service targeting daily living needs, all of which were for mental health. Of these four clients, three had moderate participation and one had a high degree of participation.

Discussion

The overall goal of these Living Laboratory investigations was to gain insights into present practices to effectively inform implementation strategies for evidence-based initiatives. By evaluating supervision practices, including various work-related activities such as face-to-face (F2F) supervision sessions and administrative tasks and client participation in programs and services, organizations can be armed with empirical evidence to better align policies and practices with the RNR Principles of effective correctional treatment.

According to the Risk Principle, higher risk clients require more levels of service, in other words, increased dosage. The Risk Principle is often viewed as one that can be relatively easily followed through risk assessment and policies aligning the supervision practices of offenders of differing levels of risk. For community supervision, the dosage of human service change efforts includes officer-client face-to-face supervision sessions as well as participation in treatment programs and services.

For F2F sessions, assessing dosage can be complex. Contact frequency is typically viewed as a proxy measurement of dosage, and policies often encourage more contacts as risk increases. For example, Agency 1 had explicit contact standards based on risk level. Although assigned reporting schedules generally followed policy, it was not perfect. For Agency 2, contact frequency is left at the discretion of the officer with the caveat of adhering to the Risk Principle. In that agency, the de facto contact schedule was once per month and results of assigned reporting schedules suggest that there was little deviation between risk levels. In fact, 67 percent of High Risk and 39 percent of Very High Risk clients were assigned once per month reporting.

However, policy and assigned reporting schedules do not always translate into actual practice. Dosage can be measured by the simple counting of F2F contacts, or average session length, but these indicators may not provide an accurate picture. For example, individual supervision sessions averaged between 21 and 29 minutes for the two agencies regardless of risk level, with most sessions lasting between 15 and 30 minutes. Given this, one might expect that clients seen more often would receive greater dosages.

The results of the standardized frequency and duration on a per month basis illustrated that more frequent sessions do not always equate to higher dosage. Results from Agency 1 revealed that although High Risk clients were seen significantly more often than Low Risk clients on a per month basis, the monthly duration or dosage of F2F interactions did not differ across risk levels, averaging from 41 to 46 minutes across the three risk levels. In other words, supervision sessions were shorter for clients of higher risk and longer for clients of lower risk. In Agency 2, no differences were found on monthly frequency of F2F sessions across the five risk levels. Although Very High Risk clients, at 52 minutes per month, received a significantly greater monthly dosage of

officer-client face-to-face interaction than Low Risk clients at 29 minutes per month, the other risk categories were equivalent, with 37 to 40 minutes per month (See Tables 2 and 3, pages 11 and 12). In both agencies, it appears more work is needed to better adhere to the Risk Principle by increasing officer-client interaction dosage for higher risk clients and/or decreasing dosage for lower risk clients.

Participation in treatment programs and other community services is another component of human service dosage to address client needs. The Need Principle focuses on services that target criminogenic needs to reduce recidivism. Although our results indicate that about 65 percent of clients were participating in some treatment program or community service, a smaller percentage of clients (51.5 percent and 60 percent for Agency 1 and 2 respectively) were participating in programs targeting criminogenic needs. Further, risk level was minimally related to the number of criminogenic need programs a client was involved in ($r = .17$ and $.15$ for Agency 1 and 2 respectively).

On the one hand, our results found some positive support of adherence to the Risk and Need principles, with 59 percent of High Risk clients from Agency 1 and 73 percent of High/Very High Risk clients from Agency 2 participating in criminogenic need programming. On the other hand, we found contrary evidence of adherence, as 33 percent of Low Risk clients from Agency 1 and 44 percent of Very Low/Low Risk clients from Agency 2 participating in criminogenic programming. Given the empirical evidence of the ineffectiveness of treatment for lower risk clients (Bonta & Andrews, 2017), the scarcity of resources, and the fact that risk was significantly and negatively associated with the degree of participation, enhanced adherence to the Risk and Need principles is challenging. It could be achieved if organizations placed greater emphasis on officer efforts to provide higher levels of criminogenic need-targeted dosage as risk increases and, conversely, lower levels as risk decreases.

Overall, the results of monthly officer-client interaction dosage and participation in criminogenic programming suggest that risk is not the primary driving factor for dosage in either agency. What, then, is driving dosage? As Paparozzi and DeMichele (2008) noted, community supervision agencies have traditionally collected data and measured performance that reflect how busy they are. Over the last couple of decades, the growth of information

technology has led to most agencies using complex information management systems to collect and store massive amounts of client information. Examining the monthly time spent in administrative tasks in Tables 2 and 3, we can see that officers spend at least the same amount or more time per month doing these tasks, particularly documenting and inputting information into offender management systems, compared to direct officer-client interaction. And it appears that the officer-client interactions suffer as a result. The recent work on correctional counsellor workloads in Iowa by Bell, Matz, Lowe, and Skinner (2018) found very similar results; an equivalent amount of counsellor time involved direct one-to-one contact with offenders (38 percent) and computer work (35 percent). It appears that today's correctional organizations are placing too much emphasis on the gathering, documenting, and storing of information, as illustrated by the observation of typical staff performance/quality assurance measurement based on the timeliness and completeness of file information. With such an emphasis, there is a danger that information gathering becomes the primary purpose of the officer-client interaction, to the detriment of human service and adherence to the principles of RNR.

The results of these Living Laboratory studies parallel Bonta et al.'s (2008) examination of typical Canadian probation work and that of Bell et al. (2018) in Iowa; that is, correctional agency practices are at best only modestly adhering to the principles of Risk and Need. As the field continues to see more community supervision agencies make an effort to implement evidence-based practices and change agent supervision training programs (Bonta et al., 2011; Bourgon, Gutierrez, & Ashton, 2012), more work needs to be done in how to improve and change organizations effectively. Implementation of large-scale initiatives requires change across all levels of the organization to ensure that organizational goals, work activities, and measures are congruent and aligned with the evidence. A Living Laboratory approach permits organizations to be armed with accurate and comprehensive information of actual practices and work activities and assist in more strategically and effectively implementing change. As Fixsen and colleagues (2005) summarized, effective evidence-based implementation requires frequent and open communication that allows all individuals to contribute to the initiative; sharing a vision, conducting accurate assessments of work activities, and encouraging

both top-down and bottom-up problem-solving. In this fashion, all individuals within the organization become part of the implementation efforts, encouraging a spirit of openness, inclusiveness, cohesiveness, and effectiveness.

Limitations

It is important to note that while this study provides interesting and much-needed information on the day-to-day activities of POs, results should be interpreted with some caution for a number of reasons. Specifically, the findings are based on a relatively small number of officers and clients, with numbers fluctuating across the study's various measures. The small sample sizes limited the analyses that could be conducted and may have impacted the ability to detect other differences that may exist. Also, these Living Laboratory studies only included a few offices and may not be representative of other locations. The study's perspective was limited to examining a 90-day "snapshot" of PO functions. Despite having clients from different stages of the community supervision process participate in the study (e.g., newly assigned to caseload or 3 to 6 months on supervision), we were unable to consider whether the workload differs for these potentially distinct periods of supervision. However, despite these limitations, this was one of the few studies that examined detailed activities of officers linked specifically to individual clients.

References

- Andrews, D. A., Bonta, J., & Hoge, R. D. (1990). Classification for effective rehabilitation: Rediscovering psychology. *Criminal Justice and Behavior*, *17*, 1952.
- Andrews, D. A., Bonta, J., & Wormith, S. J. (1995). LSI-OR.
- Andrews, D. A., Kiessling, J. J., Russell, R. J., & Grant, B. A. (1979). *Volunteers and the one-to-one supervision of adult probationers*. Toronto, Ontario: Ministry of Correctional Services.
- Andrews, D. A., Zinger, I., Hoge, R. D., Bonta, J., Gendreau, P., & Cullen, F. T. (1990). Does correctional treatment work?: A clinically relevant and psychologically informed metaanalysis. *Criminology*, *28*, 369404.
- Australian Bureau of Statistics (2016). Persons in Corrective Services. *Corrective Services, Australia*, June Quarter.
- Bell, D., Matz, A. K., Lowe, N., & Skinner, B. (2018). *Not enough time in the day: An examination of correctional counsellor workloads in Iowa*. Technical Assistance Report. American Probation and Parole Association. From www.appa-net.org/eweb/

- docs/APPA/pubs/NETDECCWI.pdf.
- Bonta, J., & Andrews, D. A. (2017). *The psychology of criminal conduct* (6th ed.). New York, NY: Routledge.
- Bonta, J., Bourgon, G., Ruge, T., Scott, T.-L., Yessine, A., Gutierrez, L., & Li, J. (2011). An experimental demonstration of training probation officers in evidence-based community supervision. *Criminal Justice and Behavior*, *38*, 1127-1148. doi: 10.1177/0093854811420678
- Bonta, J., Ruge, T., Scott, T., Bourgon, G., & Yessine, A. (2008). Exploring the black box of community supervision. *Journal of Offender Rehabilitation*, *47*, 248-270. doi: 10.1080/10509670802134085
- Bourgon, G., Gutierrez, L., & Ashton, J. (2012). Evolution of community supervision practice: The transformation from case manager to change agent. *Federal Probation*, *76*, 27-35.
- Burrell, B. (2006). *Caseload standards for probation and parole* (September 2006). Available at: http://www.appa-net.org/eweb/docs/APPA/stances/ip_CSPP.pdf
- Cullen, F. T. (2013). Rehabilitation: Beyond nothing works. In M. Tonry (Ed.), *Crime and justice, Vol. 42, Crime and justice in America 1975-2025* (pp. 299-376). Chicago, IL: University of Chicago Press.
- DeMichele, M., & Payne, B. (2018). Taking officer time seriously: A study of the daily activities of probation officers. *Probation Journal*, *65*, 39-60. doi: 10.1177/0264550517748358
- DeMichele, M., Payne, B., & Matz, A. (2011). *Community supervision workload considerations for public safety*. Washington, DC: U.S. Department of Justice, Bureau of Justice Assistance. Available at: <http://citex-erx.ist.psu.edu/viewdoc/download?doi=10.1.1.225.3408&rep=rep1&type=pdf>
- Fixsen, D. L., Naoom, S. F., Blasé, K. A., Friedman, R. M., & Wallace, F. (2005). *Implementation research: A synthesis of the literature*. Louis de la Parte Florida Mental Health Institute Publication #231. Tampa, Florida.
- Gendreau, P., Cullen, F. T., & Bonta, J. (1994). Intensive rehabilitation supervision: The next generation in community corrections. *Federal Probation*, *58*, 72-78.
- Gutierrez, L., & Bourgon, G. (2012). Drug treatment courts: A quantitative review of study and treatment quality. *Justice Research and Policy*, *14*, 47-77.
- Hanson, R. K., Bourgon, G., Helmus, L., & Hodgson, S. (2009). The principles of effective correctional treatment also apply to sexual offenders: A meta-analysis. *Criminal Justice and Behavior*, *36*, 865-891. doi: 10.1177/0093854809338545
- Jalbert, S. K., & Rhodes, W. (2012). Reduced

- caseloads improve probation outcomes. *Journal of Crime and Justice*, 35, 221-238. doi: 10.1080/073564X.2012.679875
- Kaeble, D., Glaze, L., Tsoutis, A., & Minton, T. (2015). Correctional populations in the United States, 2014. *Bureau of Justice Statistics Bulletin*. Office of Justice Programs, U.S. Department of Justice (Revised January 21, 2016).
- Koehler, J. A., Lösel, F., Akoensi, T. D., & Humphreys, D. K. (2013). A systematic review and meta-analysis of the effects of young offender treatment programs in Europe. *Journal of Experimental Criminology*, 9, 19-43. doi: 10.1007/s11292-012-9159-7
- Labrecque, R. M., Schweitzer, M., & Smith, P. (2013). Probation and parole officer adherence to the core correctional practices: An evaluation of 755 offender-officer interactions. *Advancing Practice*, University of Cincinnati, 20-23.
- Latessa, E. J., Smith, P., Schweitzer, M., & Labrecque, R. M. (2013). Evaluation of the effective practices in community supervision model (EPICS) in Ohio. Available from author, University of Cincinnati.
- Lowenkamp, C. T., Holsinger, A., Robinson, C. R., & Alexander, M. (2012). Diminishing or durable effects of STARR? A research note on 24-month re-arrest rates. *Journal of Crime and Justice*, 37, 275-283. doi: 10.1080/0735648X.2012.753849
- Ministry of Justice (2014). *Offender management statistics bulletin, England and Wales: Quarterly-April to June 2014*. London, England: Ministry of Justice.
- Orbis Partners (2003). *Service Planning Instrument (SPIn)*. Ottawa, Canada: Author.
- Paparozzi, M., & DeMichele, M. (2008). Probation and parole: Overworked, misunderstood, and under-appreciated: But why? *The Howard Journal*, 47, 275-296. doi: 10.1111/j.1468-2311.2008.00522.x
- Paparozzi, M., & Gendreau, P. (2005). An ISP that worked: Service delivery, professional orientation, and organizational supportiveness. *The Prison Journal*, 85, 445-466. Doi: 10.1177/0032885505281529
- Petersilia, J. (1999). A decade of experimenting with intermediate sanctions: What have we learned? *Justice Research and Policy*, 1, 9-23.
- Polaschek, D. L. L. (2012). An appraisal of the risk-need-responsivity (RNR) model of offender rehabilitation and its application in correctional treatment. *Legal and Criminological Psychology*, 17, 1-17. doi: 10.1111/j.2044-8333.2011.02038.x
- Public Safety Canada (2016). *The Corrections and Conditional Release Statistical Overview 2016*. Ottawa, Canada: Public Safety Canada.
- Raynor, P., Ugwudike, P., & Vanstone, M. (2014). The impact of skills in probation work: A reconviction study. *Criminology & Criminal Justice*, 14, 235-249. doi: 10.1177/1748895813494869
- Raynor, P., Ugwudike, P., Vanstone, M., & Machon, B. (2012, September). *JS3 The Jersey supervision skills study: Outcomes and reconvictions*. Jersey Probation and After-care Service, United Kingdom.
- Robinson, C. J., Lowenkamp, C. T., Holsinger, A. M., VanBenschoten, S., Alexander, M., & Oleson, J. C., (2012). A random study of staff training aimed at reducing re-arrest (STARR): using core correctional practice in probation interactions. *Journal of Criminal Justice*, 35, 167-188. doi:10.1080/0735648X.2012.674823
- Robinson, C. J., VanBenschoten, S., Alexander, M., & Lowenkamp, C. T. (2011). A random (almost) study of Staff Training Aimed at Reducing Re-arrest (STARR): Reducing recidivism through intentional design. *Federal Probation*, 75, Retrieved from: http://www.uscourts.gov/sites/default/files/75_2_10_0.pdf
- Rokkan, T., Phillips, J., Lulei, M., Poledna, S., & Kensey, A. (2015). How was your day? Exploring a day in the life of probation workers across Europe using practice diaries. *European Journal of Probation*, 7, 201-217. doi: 10.1177/20662031561042
- Smith, P., Schweitzer, M., Labrecque, R. M., & Latessa, E. J. (2012). Improving probation officers' supervision skills: An evaluation of the EPICS model. *Journal of Crime and Justice*, 35, doi: 10.1080/0735648X.2012.674826
- Trotter, C. (1996). The impact of different supervision practices in community corrections. *Australian and New Zealand Journal of Criminology*, 29, 1-18.
- Trotter, C., & Evans, P. (2012). An analysis of supervision skills in youth probation. *Australian and New Zealand Journal of Criminology*, 45, 255-273. doi: 10.1177/0004865812443678

TABLE 1.
Demographic information for all clients from Agency 1 and Agency 2.

		Agency 1 % (n)	Agency 2 % (n)
Gender	Male	78.8 (67)	81.2 (190)
	Female	21.2 (18)	18.8 (44)
Race/Ethnic Origin	Caucasian	54.1 (46)	83.2 (193)
	Indigenous	32.9 (28)	5.2 (12)
	Other	12.9 (11)	11.6 (27)
Marital Status	Single (never married)	70.2 (59)	46.6 (103)
	Married/common law	15.5 (13)	31.7 (70)
	Separated/Divorced/Widow	14.3 (12)	21.7 (48)
Employment Status	Unemployed	48.8 (41)	37.1 (83)
	Disability Pension	7.1 (6)	16.5 (37)
	Part-time Work	13.1 (11)	9.4 (21)
	Full-time Work	31.0 (26)	37.1 (83)
Risk Level	Very Low		7.3 (16)
	Low	23.2 (19)	17.8 (39)
	Moderate/Medium	45.1 (37)	40.6 (89)
	High	31.7 (26)	34.2 (75)
	Very High		11.0 (24)

TABLE 2.
Frequency of officer activities and duration of time (minutes)
spent per one-month period for Agency 1.

	Low Risk Level (n = 21) M (SD)	Moderate Risk Level (n = 34) M (SD)	High Risk Level (n = 28) M (SD)
CLIENT CONTACT			
Frequency (#/month)	2.60 (2.4)	3.06 (1.5)	3.24 (1.6)
Duration (min/month)	48.3 (55.6)	50.8 (29.1)	49.1 (39.7)
F2F Contact			
Frequency (#/month)	1.37 (0.95)	1.77 (0.75)	2.14 (1.22)
Duration (min/month)*	40.7 (40.5)	43.8 (28.0)	45.5 (38.7)
NonF2F Client Contact			
Frequency (#/month)	1.23 (2.00)	1.29 (1.20)	2.14 (1.22)
Duration (min/month)	7.6 (18.6)	6.9 (9.0)	3.6 (3.4)
ADMINISTRATIVE			
Frequency (#/month)	5.6 (4.8)	5.8 (3.6)	7.2 (2.8)
Duration (min/month)	61.0 (64.4)	48.5 (38.1)	55.4 (27.2)
Documenting			
Frequency (#/month)	3.8 (2.4)	3.7 (1.9)	4.5 (1.8)
Duration (min/month)	49.8 (50.2)	33.6 (24.3)	36.2 (22.1)
Collaterals			
Frequency (#/month)	1.0 (2.3)	1.3 (1.5)	1.6 (1.5)
Duration (min/month)	6.5 (20.5)	11.1 (18.3)	11.5 (12.0)
Case Review			
Frequency (#/month)	0.8 (0.9)	0.8 (1.0)	1.1 (1.0)
Duration (min/month)	4.7 (8.7)	3.8 (5.0)	(9.5)

* ANOVA $p < .05$

TABLE 3.
Frequency of activities and duration of time (minutes) spent per one-month period for Agency 2.

	Very Low Risk Level (n = 14) M (SD)	Low Risk Level (n = 36) M (SD)	Medium Risk Level (n = 82) M (SD)	High Risk Level (n = 46) M (SD)	Very High Risk Level (n = 23) M (SD)
CLIENT CONTACT					
Frequency (#/month)*	2.3 (0.8)	1.7 (0.8)	2.2 (1.1)	2.2 (1.0)	2.8 (1.8)
Duration (min/month)*	43.5 (24.2)	32.2 (14.9)	44.6 (28.4)	41.4 (20.0)	63.5 (60.5)
F2F Client Contact					
Frequency (#/month)	1.6 (0.6)	1.2 (0.5)	1.4 (0.6)	1.4 (0.5)	1.8 (1.2)
Duration (min/month)*	39.9 (23.1)	28.7 (15.5)	37.6 (22.0)	36.9 (19.4)	52.4 (51.4)
NonF2F Client Contact					
Frequency (#/month)	0.7 (0.6)	0.5 (0.7)	0.8 (0.8)	0.8 (0.9)	1.0 (0.8)
Duration (min/month)	3.6 (2.8)	3.4 (5.4)	7.0 (13.8)	4.54 (5.7)	11.1 (14.0)
ADMINISTRATIVE					
Frequency (#/month)*	5.5 (3.3)	3.8 (1.9)	5.4 (3.1)	6.4 (3.5)	8.9 (6.5)
Duration (min/month)*	59.7 (56.0)	35.0 (32.0)	56.0 (50.1)	73.6 (67.6)	151.8 (169.5)
Documenting					
Frequency (#/month)*	3.8 (2.0)	2.5 (1.1)	3.3 (1.6)	3.9 (1.8)	5.2 (3.6)
Duration (min/month)*	48.8 (45.9)	26.0 (24.9)	38.9 (37.0)	51.7 (49.7)	86.1 (74.8)
Collaterals					
Frequency (#/month)*	0.8 (0.9)	0.5 (0.6)	1.0 (1.1)	1.3 (1.3)	2.5 (2.4)
Duration (min/month)*	5.2 (6.9)	3.5 (4.5)	9.7 (11.5)	14.1 (21.8)	48.2 (87.9)
Case Review					
Frequency (#/month)	1.0 (0.9)	0.8 (0.8)	1.1 (1.6)	1.2 (1.3)	1.1 (1.1)
Duration (min/month)*	5.7 (7.1)	5.5 (6.4)	7.3 (8.6)	7.8 (9.8)	17.5 (23.2)

* ANOVA $p < .05$

TABLE 4.
Percentage of clients participating in various programs and services.

	Any Programs/ Services % (n)	Those targeting Criminogenic Needs ¹ % (n)	Those targeting daily living ² % (n)
Agency 1 Total	64.7 (44)	51.5 (35)	30.9 (21)
Risk Level Low	40.0 (6)	33.3 (5)	6.7 (1)
Moderate	65.5 (19)	51.7 (15)	27.6 (8)
High	77.3 (17)	59.1 (13)	50.0 (11)
Agency 2 Total	65.2 (43)	60.0 (40)	6.1 (4)
Risk Level Very Low & Low	55.6 (15)	44.4 (12)	11.1 (3)
Medium	70.8 (17)	70.8 (17)	4.2 (1)
High & Very High	73.3 (11)	73.3 (11)	0.0 (0)

¹ Refers to those services addressing antisocial personality, procriminal attitudes, procriminal peers, employment, education, substance abuse, family, marital, and sexual deviance.

² Refers to those services addressing mental health, accommodation, and finances.