

New Chance: Process and Impact Evaluation¹

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Executive Summary

This report provides an overview of the experiences of clients participating in the New Chance Programme, police staff involved in the programme, and New Chance workers and a quantitative analysis of the New Chance Programme with an aim to provide insights of the effectiveness of this programme and how it affects the recidivism among the clients participating in the programme.

The first part of the project involved interviews with those involved in the programme and subsequent analysis of responses with the aim of developing an understanding of what people believe to be working well about the programme and what (if any) aspects could be improved upon. Nine interviews were conducted (four with clients; three with New Chance workers; and two with police staff). Transcripts were analysed using thematic analysis. Findings are presented in two sections: themes emerging from client interviews; and themes emerging from staff interviews. We found that:

- The programme was viewed positively by staff and clients alike.
- Staff highlighted aspects of the programme that have improved since its commencement (e.g. aspects of the referral process and communication between police and New Chance workers).
- Clients made reference to what they felt they have gained through participating in the programme; it was felt that a wide range of both practical and emotional needs were met through one-to-one meetings with their New Chance worker.
- In addition to one-to-one meetings, clients and staff noted the benefits of multi-agency cooperation in terms of additional resources at their disposal (e.g. counselling and legal advice).
- Clients highlighted additional aspects which they felt contribute to the success of the programme (e.g. staff skills/characteristics and the centre environment).
- As a result of the flexibility afforded to New Chance workers, it was felt that the programme was responsive to the needs of the individual clients.
- Staff noted that there are still less referrals than expected (although they are increasing);
 suggestions were made as to reasons for a lack of referrals and suggestions for improvements offered.
- Additional suggestions were made by staff regarding general improvements they felt could be made to further benefit clients (e.g. financial assistance for clients with their travel costs, and more support in the areas of housing and mental health).

The second part of the project analyses the impact on offenders who have been referred to the New Chance programme. This involved an empirical analysis of the data provided about those individuals who were participating in the New Chance Programme. Data were analysed to provide insights to the background characteristics of the participants in the programme and their offending rates were compared before and after the programme. Then using data provided by the West Midlands Police, a control group was formed (i.e. those not being supported via New Chance but who would have been eligible) so we could match offenders using Propensity Score Matching (a quasi-experimental design) to calculate Average Treatment Effect on recidivism rates which indicates the change on average reoffending (if any) due to the New Chance programme.

We start by looking at descriptive statistics which give us insights in the types of crimes recorded and the main characteristics of the offenders. We then analyse offending and reoffending rates for our given sample. Finally, we match treatment group to a control group of offenders to see what is the difference in their reoffending outcomes. We found that:

- There were a total of 421 referrals to the New Chance intervention from June 2016 to January 2020
- In the past 12 months prior to the referral date, the average number of offences per offender was 3.2 (ranging from 0 to 7). Total (police recorded) offending history was higher and the average number of offences per offender was 13.8 (ranging from 1 to 78)
- Around two thirds of the total offenders were identified as White North Europeans, two thirds were aged 22 to 40 and 42% of offenders were unemployed
- Nearly 20 % of offenders had substance misuse issues identified and over 40% had mental health/wellbeing issues identified
- 22% of offenders reoffended after/during the treatment. On average, there were 3.20 offences per offender in one year before treatment and 2.95 offences 12 months after (the difference of 0.25 was statistically significant at 5% level). We also followed up those offenders for whom we had data for 12 months (N = 247) and they had a difference of 0.32 (3.20 before and 2.88 after) which was also statistically significant.
- Reoffending rates were lower for offenders who engaged for longer than one appointment: it was 28% for those who did not engage or attended one appointment only and 17% for those

who had engagement level identified as 'ongoing'. The difference of 11% was statistically significant. Analysis of engagement length showed that reoffending rates were 26% who did not engage or attended one appointment only and 17% for those who engaged for longer (up to 3 months, 3-6 months and more than 6 months) and the difference of 9% was statistically significant.

- Reoffending rates were higher for offenders who were identified as Black or Asian, who were
 aged 21 24 and 31 35 years old, were unemployed, had identified substance misuse or
 mental health/wellbeing issues (when compared to those who had no such issues identified
 though we note that there were many cases where this information was unavailable)
- After matching to a control group of offenders, the difference in overall reoffending rate was
 16% lower for the treatment group which was statistically significant
- The difference in reoffending was also significant within 60 days, 6 months and 12 months between treatment and control groups and ranged between 7% to 11%. These findings suggest that the intervention had a positive effect on offenders and reduced their reoffending rates
- Reduction in reoffending rates was particularly high (and statistically significant) when comparing samples of offenders with mental health (MH) and substance misuse issues:
 - Reoffending for women who were facing MH issues was 35-37% lower and was statistically significant in the treatment group
 - Women in the treatment group who had substance misuse issues identified had a 51 55% decrease in reoffending
 - o These findings suggest that the New Chance intervention could have had a positive effect on offenders' MH and may have provided suitable support for their substance misuse problems, which in turn had a positive effect on the offenders' criminal behaviour.

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1.1 Background and Overall Aim

The project is an initiative funded by the WM Office of the Police and Crime Commissioner (OPCC) to pilot an 'early intervention' approach to providing support for women who are identified as early entrants into the Criminal Justice system to support them away from further offending. This has been guided by the "Whole System Approach" for female offenders document (Ministry of Justice, November 2015) recognising the need for a multi-disciplinary approach to meet the needs of these offenders who are often from a vulnerable section of the population. This project (called 'New Chance') is a service aimed at adult (over 18) women who have been arrested but are considered suitable for out of court disposal and are felt in need of emotional and practical support. The two areas covered are Birmingham and Sandwell. They are referred (with their consent) to Women's Aid (Sandwell) and Anawim (Birmingham).

The evaluation sought to assess effectiveness of the intervention both through (i) understanding the process through which the programme helped offenders (evaluated through interviews with offenders and staff involved with the study) and (ii) focus on a number of key outputs namely reoffending rates, as well as reoffending rates across different time periods in comparison to a control group. It would have been ideal to look at children taken into care, lowered victimisation, reduced drug use and lowered domestic abuse, comparing each of these rates before and after the intervention as well as in comparison to a control group but such data were not available.

1.2 Aim of the Process Evaluation

1.2.1 Client study

The aim of the process evaluation with clients was to gain an understanding of their experiences of participating in the programme thus far. More specifically, the aims were to explore views regarding: whether (and in what ways) they felt they had benefitted from the programme (if at all); what they felt was good about the programme, what didn't work so well and, therefore what changes could be made.

1.2.2 Staff study

The aim of the process evaluation with staff was to gain insight into staff experiences of delivering the programme. Specifically, whether it is achieving its goals, what is going well, what isn't going well, and what suggestions for improvements staff have.

1.2.3. Ethics

The study received ethical approval from the University of Birmingham Ethics Committee (Reference: ERN_17-0349). All participants gave informed consent prior to the interview. They were made aware that participation was voluntary and, as such, there would be no negative consequences of not participating. They were also made aware that they could withdraw at any time during the interview or up to one week following the interview. Audio recordings were deleted following transcription and interview transcripts were held in password protected files. All data for the quantitative study was anonymised and held in the UoB researcher's secure laptop.

1.3 Aim of the Impact Evaluation

1.3.1 Descriptive analysis

The descriptive statistics helped us to gain insight into what were the offenders' characteristics for the treatment group, i.e. their age categories, ethnicities, employment status etc.

1.3.2 Before and after analysis

The aim of the before and after analysis was to understand the patterns of offending for the treatment group before and after they have been participating in the New Chance Programme. Specifically, to observe their reoffending rates overall and across heterogenous groups of offenders after participating in the New Chance Programme.

1.3.3 Treatment and Control analysis

The aim of the Propensity Score Matching (Treatment and Control analysis) was to be able to calculate the average treatment effect of the New Chance Programme. Average Treatment Effect captures the difference in mean effect of the intervention on reoffending rates compared to the control and allows us to quantify the effectiveness of the programme.

Part A – Qualitative Analysis

2.1 Client study

Interviews were conducted with four clients between June and July 2017. All clients were engaging with the programme and had had regular contact with their New Chance worker. Two clients had been participating in the programme for approximately two months, one client for approximately three months, and one client for approximately four months. The frequency of contact varied between clients; one client had almost daily contact, one had weekly contact, and the remaining two had contact on a fortnightly basis. Three of the clients interviewed were under conditional caution, and one was there as a result of a voluntary referral. Due to the need to retain anonymity for all clients, it is not possible to provide individual level information regarding location, duration/frequency of contact, and type of referral.

All interviews were conducted by Dr Zoe Stephenson (University of Birmingham). Interviews took a semi-structured format (i.e. supplementary questions/prompts specific to the individual in addition to specific set questions; see Appendix 1). A forty-five minute time slot was allocated for each interview, however, interviews lasted between 11 and 15 minutes. The short duration was attributed to clients not having responses to questions regarding things that hadn't gone well or things they would change. Interviews were conducted in the client's respective centre (i.e. Anawim, Sandwell, or Dudley). Two interviews were conducted with only the interviewer and client present. The remaining two clients requested that their New Chance worker be present during the interview. All interviews were audio-recorded and transcribed in full².

2.2 Staff study

Three New Chance workers were interviewed between June and July 2017 by Dr Zoe Stephenson. Interviews took a semi-structured format (see Appendix 2). Prompts and supplementary questions were used in addition to set questions. Interviews lasted between 19 and 40 minutes. Interviews with New Chance workers were conducted in their respective place of work (i.e. Anawin or Sandwell).

² There is inevitably self-selection of participants as the research team was only able to interview willing participants. The aim was to gain an understanding of the way the process worked for different stakeholders, rather than create a representative sample for detailed statistical analysis. The next part of the report conducts statistical analysis based on data received from WMP

Interviews with police staff were conducted via telephone. All interviews were audio-recorded and transcribed in full.

2.3 Analysis

Interview transcripts were analysed using thematic analysis¹ by Dr Zoe Stephenson. The analysis involves the coding of transcripts and subsequent identification of overarching sub-themes and main themes. Themes are described and illustrative quotes provided in Tables 1 (clients) and 2 (staff). Full descriptions of themes and sub-themes are then provided.

¹See Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology, 3* (2). pp. 77-101.

2.4 Findings

2.4.1 Client response summary

Table 1: Summary of themes derived from interviews with clients

Theme/sub-theme	Description	Example quotes
1. How has it helped me?		'I felt I can open up and been able to talk and I've felt the
1.1 Emotional needs	All women interviewed provided solely positive feedback regarding their experiences of	support has been more than I've ever known my whole life'
1.1.1 Listening ear	the New Chance programme. Women described how their emotional needs had been	(C1)
1.1.2 Techniques	met through having someone listen to them and through being provided with	
1.2. Practical needs	techniques to address negative emotional responses. Women also spoke about having	'we did relaxation, and I went out smilingI've been using
1.3. Signposting	their respective practical needs met (e.g. finances, social services) and, where necessary,	them [relaxation techniques] at home as well at home.' (C3)
1.4. Knowledge	being signposted to organisations that could provide additional help (e.g. legal advice	
1.5. Results	and counselling). Responses also showed that women felt that they had learned a lot	'she's referred me to counsellingThey point you in the right
1.5.1 Behavioural change	about themselves from their New Chance worker and were keen to highlight how they	direction for things and that' (C2)
1.5.2 Psychological	had changed as a result of participating in the programme.	
change		'My temper is not as much as it was. There's been no calling out
		[of the police], no incidents, and mine and my partner's
		relationship has been a lot better since I've been on here [New
		Chance].' (C2)
2. Why it works		'Reliable, trustworthy, honest, good with advice and putting you
2.1 'One-stop-shop'	In response to questions around their experiences of the programme, the women	on the right track' (C2)
2.2 Staff	provided their thoughts on why the programme worked well for them, as well as why	
characteristics/attributes	they felt it would also help others. Reference was made to being able to get all their	'and there's just me, one to one, so it was lovely.' (C3)
2.3 Tailored to me	needs met through one service, their views on their respective New Chance workers, the	
2.4 Environment		'because you feel safe in here as well, you know.' (C1)

	worker being able to tailor the support to their individual needs/circumstances, and the	
	feeling of safety/escape that the centre provided.	'I had debt problems, housing problems and that, and I've only
		got like [names New Chace worker] and counselling left now,
		because they've all seen a big improvement.' (C2)
3. Perceptions	The women were asked to comment on how they felt about the programme prior to	'Just a load of shite to be honest [expectation of what the
3.1 Before starting	taking part and whether their views had changed. Women reported that, prior to taking	programme would be like], yeah, so just, more, just like, just not
3.2 And now	part, they were unsure what to expect and had been somewhat sceptical regarding	help. I didn't expect to get helpEven though I needed it [help] I
	whether or not it would be something that could help them. However, all women now	didn't expect to get it' (C1)
	report that they had found the programme to be very beneficial. One woman made	
	positive comparisons between the New Chance programme and previous	'It's just a great project. They should do it more often' (C2)
	support/interventions she had experienced.	

^{*}Note 'C' = Client

2.4.2 Full description of Themes and Sub-themes

2.4.2.1 Theme 1. How has it helped me?

All women interviewed provided solely positive feedback regarding their experiences in the New Chance scheme. Women described how their emotional needs had been met through having someone listen to them and through being provided with techniques to address negative emotional responses. Women also spoke about having their respective practical needs met (e.g. finances, social services) and, where necessary, being signposted to organisations that could provide additional help (e.g. legal advice and counselling). Responses also showed that the women felt that they had learned a lot about themselves from their New Chance worker and were keen to highlight how they had changed as a result of participating in the programme.

Emotional needs

A common theme amongst the women interviewed was that they felt they hadn't had their emotional needs addressed in the past but that, through time spent with their New Chance worker, such needs were being met both through having someone to listen to them and also being given some practical advice regarding coping with negative emotions.

Listening ear and advice

All women made reference to feeling they could talk openly about their thoughts, experiences and feelings to their New Chance worker. Some commented that this is something they haven't experienced in the past (i.e. with friends or family).

'I felt I could open up and been able to talk...I felt comfortable...and I felt, yeah, I could open up straightaway...I don't normally feel that way, like you can't normally find that, you know...I

don't open up to no one...' (C1)

'...I'm not one of the types of person to open up my feelings because I just let it bottle up...But coming here, it's...I don't do that no more.' (C2)

'I felt I can open up and been able to talk and I've felt the support has been more than I've ever known my whole life...' (C1)

It was felt that being able to talk openly to someone who cared, didn't judge them, and provided encouragement/advice (see sub-theme 2.2) had helped in such areas as increasing levels of confidence, alleviating feelings of depression and feeling more positive about the future.

'It's just time to talk about things and mistakes we've made and just things like that...just good advice really...I was like bottom, you know, where I was really unhappy and really down and things escalated out of control, and she just told me how to challenge him...I think it's just great for somebody to have somewhere to go, somebody to talk to who they can trust, and, like I say, talk openly.' (C3)

'It's settling my mind down again, if you know what I mean?...I think I would probably have slipped further down if I'd not been here and seen [name of New Chance worker].' (C4)

Techniques

In addition to listening and providing general support and advice, some women also made reference to their New Chance worker having given them some practical techniques which they can use to help cope with negative emotions.

'...when I got in I was really emotional – I was in tears. And she just calmed me down, had a cup of coffee, relax – we did relaxation, and I went out smiling...I've been using them

[relaxation techniques] at home as well.' (C3)

The use of adult colouring books and puzzle books were also mentioned as a technique used to keep calm.

Practical needs

Women commented that New Chance workers had offered support for a variety of practical needs (e.g. finances, liaison with social services, and benefits).

'...she's [New Chance worker] helped me with like a lot of my benefits and what I probably wouldn't understand, you know, things like that...' (C4)

'...my son's in care, she [New Chance worker] helps me like...because I'm not getting nowhere with Social Work, she phoned them and explained like what happened, and now that [name of New Chance worker] spoke to her, I'm getting the right information and everything is coming through the post as it should be...' (C2)

Signposting

Half the women made mention that their New Chance worker had been able to point them in the right direction for further support where necessary (e.g. professional counselling and substance misuse support). They were aware that they could ask their New Chance worker for specific help and that their worker would be able to arrange this for them.

'...she's referred me to counselling...They point you in the right direction for things and that...'
(C2)

Knowledge

Staff were praised for the amount of knowledge they were able to impart during sessions. Comments were made by the women regarding how staff had helped them learn about themselves and helped them see how they could go about achieving their goals.

'...she'll (New Chance worker) do some work about emotional needs and relationship crisis and anti-depressants, the side effects and all that lot, and then we have some SMART goals to where I am...' (C2)

With reference to taking the advice of the New Chance worker, one woman commented that she takes it on board and uses it, implying that this is because she feels the New Chance worker is knowledgeable (i.e. trained) and good at her job.

'...because I know she's best at her job and that's what she's trained for...' (C3).

Results

Women were keen to highlight that they have changed as a result of the time spent with their New Chance worker. Both behavioural and psychological changes were noted.

Behavioural change

Examples were provided by one woman such as no longer being reliant on alcohol, no police call outs since she had started attending sessions, better relationships, and no instances of violence.

'My temper is not as much as it was. There's been no calling out [of the police], no incidents, and mine and my partner's relationship has been a lot better since I've been on here [New Chance].' (C2)

In addition, the woman commented that her New Chance worker had helped her to consider the consequences of her actions which had led to her being better able to control her behaviour.

'...and then someone gets called out, he goes into hospital and then it just...and you feel sorry and...and then it's just one...one big circle and it rotates itself again. And then I can see the side effects it's hurting onto my partner. If it keep doing it, he's going to end up walking...' (C2)

Psychological change

In addition to general positive feedback about the scheme, two women made reference to how they feel that contact with their New Chance worker has led to internal changes.

'...I'm a lot better in myself.' (C4) and '...built up my confidence, yeah, built up my confidence.'

(C3)

2.4.2.2 Theme 2. Why it works...

In response to questions around their experiences of the programme, women commented on why the programme worked well for them, as well as why they felt it would also help others. Reference was made to being able to get all their needs met through one service, their views on their respective New Chance workers, the worker being able to tailor the support to their individual needs/circumstances, and the feeling of safety/escape that the centre provided.

'One-stop-shop'

It was recognised that the New Chance worker was able to address a wide range of needs (see subthemes 1.1 and 1.2). They were aware that they could tell their worker about any issue and that appropriate help would be given. A range of areas of support were mentioned (e.g. housing, finances, social services, emotional support, relaxation techniques, clothing etc...). Being able to access all this support through one individual was felt to be preferable to/more effective than being directed to multiple agencies for their range of needs. However, as mentioned, it was also noted that, where necessary, being signposted to other services (e.g. counselling) could benefit them.

'[before] I had help for my alcohol, Kaleidoscope because I couldn't keep up with my debt – I had debt problems, housing problems and that, and I've only got like [name of New Chance worker] and counselling left now, because they've all seen a big improvement.' (C2)

Staff characteristics/attributes

A prominent sub-theme was that of the women's positive views of their respective New Chance workers. All women made reference to how highly they regarded their New Chance worker and implied that this was of paramount importance to the effectiveness of the support they had received.

'...like the way, you know, I can talk to her, em, you know, and she doesn't like judge. You don't feel like you're looked down on. You know, you feel like you're human...' (C1)

"...she [New Chance worker] is brilliant, she is brilliant...I look forward to her coming or she rings me up or something like that. She's brilliant, yeah." (C4)

'Reliable, trustworthy, honest, good with advice and putting you on the right track...' (C2)

Tailored to me

The women noted a range of needs (e.g. practical, psychological/emotional, behavioural – as outlined above). Through providing descriptions of how their New Chance worker had met their needs, it was evident that the support is tailored to the individual needs of each woman. The New Chance worker assesses needs and then provides the necessary support. In addition, it was evident that New Chance workers took individual practical circumstances into consideration, for example, two women struggled with getting public transport due to health issues and said this would be a barrier to them in attending sessions at their respective locations. New Chance workers had, therefore, gone to visit them or picked them up and brought them to the centre.

'...and I don't use public transport, so [it's meant her picking me up] and stuff, which has been a big...a really big thing.' (C1)

'I'm not a good traveller and that, so [name of New Chance worker] has been coming to me.'

(C4)

In addition, all women reported having benefitted from the one-to-one approach. The majority felt that this was preferable to group work.

'...and there's just me, one-to-one, so it was lovely.' (C3)

Environment

Women who were more frequent visitors to their respective centres commented that it was a nice environment. No men are allowed in the centres and women are encouraged to feel at home (e.g. can help themselves to tea/coffee).

'...because you feel safe in here as well, you know.' (C1)

2.4.2.3 Theme 3. Perceptions

The women were asked to comment on how they felt about the programme prior to taking part and whether their views had changed. Women reported that, prior to the programme, they were unsure what to expect and had been somewhat sceptical as to whether or not it would be something that could help them. However, all women now report that they found the programme to be very beneficial.

Before starting

Women reported that they were unsure as to what to expect from the New Chance programme which they felt to be unsettling. However, in the case of one woman, she agreed to attend as she was aware of the consequences if she did not.

'Nervous, really thinking, you know, what's going to happen and what they might say, or who would be involved and all that like...They said, eh, if I don't go, there'd be – if I didn't attend my first appointment, there'd be a warrant out for my arrest.' (C2)

Some women were concerned that it would be a negative experience. However, one women, having been told some details, felt positive about participating.

'Just a load of shite to be honest [expectation of what the programme would be like], yeah, so just, more, just like, just not help. I didn't expect to get help...Even though I needed it [help] I didn't expect to get it...' (C1)

'Well, at first I thought, do I really need to go through this, because I'm getting old now.' (C4)

'Quite positive actually when I was told about it. It still wasn't a bit what I expected it to be like...I expected to be sitting in a circle...but, em, it's better than what I thought it would be [because it's one to one].' (C3)

And now...

All women reported that, having taken part in the programme, they held a positive view of how it had impacted upon them, with some also commenting that they felt the programme would benefit others.

'...it definitely helped me...I would be lost without this place, and I bet a lot of other women would be as well...It was a blessing in disguise coming here.' (C1)

'It's gone really well actually, yeah. I'm actually getting somewhere now. (C4)

'I think it's a good scheme, you know, for people – there's a lot of people out there with different situations, and I just think it's good for them to come...' (C3)

'It's just a great project. They should do it more often...' (C2)

With reference to how the programme compares to support received in the past, one woman noted that she felt that she had not benefitted from other programmes in the past but that she has had a positive experience of the New Chance programme.

'...I've felt the support has been more than I've ever known my whole life, because I've been, you know, through systems my whole life and I've never, ever had the support until now.' (C1)

2.4.3 Staff response summary

Table 1: Summary of themes derived from interviews with police staff and New Chance workers

Theme/sub-theme	Description	Example quotes
1. Referrals	There was predominantly positive feedback from staff in terms of how the process of referrals	'The process is quite easy now, simple, and has improved over
	is working. Police staff noted that the process of referrals is well organised and generally now	timepeople have got more comfy with it [making referrals].' (P2)
1.1 Referral forms	runs smoothly with all officers in their team being aware of the programme and the criteria	
1.2 Number of referrals	which must be met for a referral to be made. Officers were reported as having a positive view	'But if it was proved to be successful and rolled out, I think the
1.3 Suggestions	of the programme and it was felt that police staff are given adequate	criteria would need to be looked at to help more people.' (P1)
	information/training/written material. However, it was noted that referral forms from the	
	police have lacked sufficient detail in the past, and that there have been less referrals that	'I did have a problem with that [referral paperwork] a lot at the
	expected. Potential reasons for this were thought to include the criteria for inclusion in the	start, em, because they [police] would never fill in the paperwork,
	programme, insufficient detail about the scheme in written material for potential clients, high	em, for a lot of mine' (P4)
	police staff turnover, and women not engaging with the programme.	
2. Achieving goals	Both police and New Chance workers made reference to ways in which the programme is	in every single way really. I don't think there's anything that, er,
	achieving its goals. Reference was made to factors which increase the likelihood of	they [clients] couldn't be supported in, that they [New Chance
2.1 Timing	engagement (e.g. the time at which women are approached to take part and being responsive	workers] couldn't provide support and help with.' (P1)
2.1.1 Approaching in prison	to their individual needs), emotional and practical needs that are able to be addressed through	
2.1.2 Timely support	the scheme, the wide range of programmes/individuals women can be referred to for specific	"our approach is, em, it's listening and it's tailormade to suit the
2.2 Addressing needs	needs (e.g. solicitors, registered counsellors etc), factors which contribute to the effective	individual person that comes throughwhat we do is based on
2.2.1 Additional programmes	running of the programme (e.g. multi-agency cooperation and good relations between police	what someone presents withI think that's really exciting.' (P5)
2.2.2 Practical needs	and New Chance workers), and how the knowledge and skill set of staff benefit the women.	
2.3 Responsivity		'I love the whole ethosin supporting women, vulnerable
2.4 Relationships between police and		womenbeing all about themIt's not just this is what we're saying
New Chance workers		and we're doing this. It's everybody actually believes what they're
2.5 Multiagency cooperation		doing and saying' (P4)
2.6 Staff skills and attitudes		

3. Reflections on the New Chance	New Chance workers made reference to what they felt women have benefitted from (in	'having that person and that place to come to I think it's that
programme	addition to specific one-to-one support) and what they might find helpful (i.e. group work).	second person that's not involved in the criminal justice system that
	Both police and New Chance workers expressed their opinions regarding client engagement	they can sort of open up to.' (P3)
3.1 From personal experience	with the programme (i.e. differences between voluntary participation and conditional	
3.1.1 What women find helpful	cautions, and the difficulties around encouraging women to engage when they aren't ready to	It's giving them ways that then they can carry on and function
3.1.2 Engagement issues	do so). New Chance workers commented on what they felt to be barriers to the support they	properly in society you can see very real ways it's helped people.'
3.1.3 Barriers	can offer (i.e. a lack of funds for transport and a lack of support for clients with mental health	(P4)
3.2 Outcomes	needs). New Chance workers reported positive outcomes of the programme for those who	
3.3 Suggestions	engaged and all staff made suggestions as to improvements which could benefit clients (i.e.	'It's like any offenders that we manage, whether they're female,
	accommodation, funding for transport, mental health support, and group work).	male, etc., if they're not ready, they're not ready. You can't affect
		them. They have to be ready and they have to be ready for
		change.' (P2)

^{*}Note 'P' = Participant. To reduce the likelihood of any particular interviewee being identified, we have not labelled Police staff and New Chance workers separately.

2.4.4 Full description of Themes and Sub-themes

2.4.4.1 Referrals

There was predominantly positive feedback from staff in terms of how the process of referrals is working. Police staff noted that the process of referrals is well organised and generally now runs smoothly with all officers in their team being aware of the programme and the criteria which must be met for a referral to be made. Officers were reported as having a positive view of the programme and it was felt that they are given adequate information/training/written material. However, some staff made mention of previous shortcomings and made suggestions as to how they could be addressed.

Referral forms

New Chance staff noted that there were some issues earlier on (now resolved) where they felt they were not provided with adequate information in the referral form from the police. In addition, there had been previous concerns by New Chance staff that some police officers were not providing potential clients with adequate information about the programme which may have made it less likely that they would agree to attend.

'I did have a problem with that [referral paperwork] a lot at the start, em, because they

[police] would never fill in the paperwork, em, for a lot of mine...' (P4)

It was commented by a New Chance worker that, through no fault of police staff, the referral form will often not include the full range of needs that a woman has; it was suggested that this is because women are less likely to open up to the police than to them.

'...the police officer ticks what they think they need help with. I can get a referral form that's got one tick on it, and by the time I've done my initial assessment, I've got 80% of them ticked that they need help with.' (P3)

Number of referrals

It was reported that there have been less referrals than expected prior to the start of the programme.

A number of reasons are suggested for this:

- 1) Lack of continuity of police staff (i.e. high staff turnaround in the department);
- 2) Stringent criteria (i.e. age range, historical convictions);
- Referrals only being made from conditional cautions rather than on a voluntary basis
 (Anawim) or referrals being predominantly voluntary rather than from conditional cautions
 (Sandwell);
- 4) Written material given to the women being overly generic and not doing the programme justice (it is noted that this is currently in the process of being improved);
- 5) Changes in police policy/procedure on arrests since the implementation of the programme;
- 6) Police officer lack of awareness of the programme, and
- 7) A lack of engagement from women with voluntary referrals.

However, police and New Chance workers highlighted that the situation is improving (i.e. more referrals are being made) in Sandwell following the involvement of the Prison Intervention Team (PIT) who deal with out of court disposals.

Regarding continuity of police staff, it was noted that high staff turnover can have a negative impact.

"...all the restructuring in the last couple of years of the police...there's been a lot of, a huge turnover of staff moving in different departments, so it's, it's hard to get the continuity of a specific team who deal with these individuals." (P1)

A police interviewee commented that one reason for a lower number of referrals than expected was that the number of eligible females going into custody has reduced due to changes in procedures with this type of offender.

"...a few things have changed within our service. For an example, a lot more offences are dealt with by voluntary interviews rather than coming into custody because to pass the custody threshold, you have to pass the necessity tests for arrests." (P1)

It was further commented that not all officers are fully aware of the New Chance programme due to a heavy workload. This was thought to potentially result in some women who were suitable for the programme not being referred.

'Workload and the amount of things that each police officer has to remember and, you know, the different agencies to refer to etc...' (P1)

However, it was also noted by a police interviewee that, over time, police are becoming more familiar with the process of referrals. They have flow charts which provide them with a quick guide as to whether a woman would be suitable or not for the programme.

'The process is quite easy now, simple, and has improved over time...people have got more comfy with it [making referrals].' (P2)

Regarding criteria for referrals, it was commented by one New Chance worker that where it is a voluntary referral, women may appear to be keen to attend when at the police station but that their interest is not genuine so getting voluntary referrals is difficult.

'...it was difficult as well as first because it was voluntary referrals that we were getting, so that was women going to the police station and them saying "yeah, yeah, we'll engage with Anawim" or do anything to just sort of leave the police station...and you'd try and contact them and you weren't getting anything back. Whereas recently it's changed to conditional caution so they have to engage...' (P3)

It was felt that some women who may have been eligible could have fallen through the net due to the above issues. A suggestion is made below (see section 1.3) for an alternative mechanism of recruiting women onto the programme.

It was noted that, due to a lack of clients, it has not been possible to do group work (although this is not necessarily a negative issue). In addition, it was felt that issues with criteria restrictions may mean that women who would benefit from the programme have not be referred.

Suggestions

Although there has been an increase in the number of referrals, it was requested that these be increased further. Based on the above issues it was suggested that: criteria are reviewed and slight amendments made if viable; written material for women is revised (currently underway); and more officers to be made aware of the programme.

'But if it was proved to be successful and rolled out, I think the criteria would need to be looked at to help more people.' (P1)

Criteria referred to were the age bracket of women (i.e. extending the maximum age to include those over the age of 40) and the issue of previous convictions (i.e. potentially adapting the criteria to include women with a small number of previous/historical convictions).

It was suggested by New Chance workers that a potential way to increase referrals could be for them to have a presence in a police station at times so that they could approach women directly; it was felt this may increase the likelihood of women subsequently engaging.

'...maybe one day a week one of us went down there [police station] and was based in an office down there...just so when they have someone that comes in that is suitable for Anawim, we get to go in and just explain a little bit about it.' (P3).

2.4.4.3 Achieving goals

Both police and New Chance workers made reference to ways in which the programme is achieving its goals. Reference was made to factors which increase the likelihood of engagement (e.g. the time at which women are approached to take part and being responsive to their individual needs), emotional and practical needs that are able to be addressed through the scheme, the wide range of programmes/individuals women can be referred to for specific needs (e.g. solicitors, registered counsellors etc...), factors which contribute to the effective running of the programme (e.g. multi-agency cooperation and good relations between police and New Chance workers), and how the knowledge and skill set of staff benefit the women.

Timing

Both the timing of approaching women with details about the programme and the timing of addressing the needs of women were mentioned as being of importance in increasing the likelihood that women would engage with the programme and that they would be able to receive support when they are in the most need (i.e. as opposed to only being able to access support at specific times each week).

Approaching in prison

One police staff member noted that, in his experience, upon arrest, people are more likely to admit that they need support. As such, providing women with information at this time may increase the likelihood that they will accept help.

'So, it's a good time to go and talk to them and offer them help, and you tend to find, not just with females, with anyone really, that if they want to admit to needing help, then that's a good time to do it.' (P2)

Timely support

A New Chance worker commented that a positive aspect of the programme is that women are able to contact them and come to the centre (Anawim or Sandwell) at any time. Where women are in distress at a particular time, they are able to access support within a short space of time which may reduce the likelihood of a negative outcome.

'...if they're in a time of distress, they'll come here because they know they'll be able to talk to somebody or at least just calm down...just get that little bit of support that just will help them to just get on to the next stage without anything drastic happening or with a terrible knock-on effect...' (P3)

Addressing *needs*

New Chance workers mentioned a range of needs that clients tend to have. Although there is diversity amongst clients, some needs that frequently arise include substance misuse, domestic violence, past trauma, finance and mental health issues. Where possible, the New Chance worker can meet the needs of the client. However, where they feel a client may benefit from more specific support, they are able to signpost them to other programmes/individuals. Through a combination of the skills of the New Chance workers and the resources at their disposal, it was commented by a member of police staff that the programme can provide a wide range of support for women.

'...in every single way really. I don't think there's anything that, er, they [clients] couldn't be supported in, that they [New Chance workers] couldn't provide support and help with.' (P1)

Additional programmes

New Chance workers made mention of additional programmes that they are able to suggest women attend. For example, Red (Regulating and dealing with distress) for women who have specific needs

related to anxiety, and Seeking Safety for women with substance misuse issues. Programmes are also available for women who have experienced past trauma and feel they would benefit from talking about this. Other programmes/support include one-to-one sessions with psychologists, Rape Chat, Recovery, Therapeutic Art, money advice and access to a solicitor. New Chance workers were confident regarding their ability to identify whether a client would benefit from any additional support.

Practical needs

An emphasis was placed by New Chance workers on their ability to address the range of practical needs that women may have. Examples given included being able to provide clothing for a client, being able to intervene with a shop manager on the client's behalf to explain the client's situation (resulting in the shop not pressing charges), arranging temporary accommodation, helping to fill out housing application forms, and (as also noted by clients) being able to drive to see the women in cases where it is not possible for a woman to get public transport.

'...you would be amazed at the amount of women that don't know how to fill out a housing application...once you get that third party that's helping them along and saying "this is what you need to do", sitting with them, it makes a massive difference.' (P3)

Responsivity

New Chance workers emphasised that they are responsive to the needs of the individual client. Whilst they recognise that there may be commonalities amongst women in terms of what issues need to be addressed, they highlighted the need to be flexible to the needs of the individual woman. One New Chance worker went further to praise the New Chance programme for afforded them the opportunity to be responsive to the needs of the women.

'...the whole concept of New Chance is just amazing because we have so much flexibility...because we've got a broad list in terms of what we can do...because our approach is, em, it's listening and it's tailormade to suit the individual person that comes through...what we do is based on what someone presents with...I think that's really exciting.' (P5)

Relationships between police and New Chance workers

Both the police staff and New Chance workers commented on the relationship/communication with each other. Frequent communication was found to be very useful in addressing any barriers to the

effective running of the programme. Quarterly meetings between the police and New Chance staff were found to be beneficial in terms of trouble shooting and in encouraging each other by providing positive feedback.

'...that's our massive thing here, is having a good relationship with the police officers. We've found lately that we're getting a lot back, so we'll email them and say, "Just a quick update, I've met blah-blah, we've done this, we've done that, this is where we're going to go next", and then actually getting an email back saying, "Thank you – it's really nice to hear". It builds a better bond between us and the arresting officers... we have quarterly meetings with the police, and it tends to be sort of, em, someone from Perry Barr, someone from Sutton, and someone from Erdington, and we just talk about what we think could maybe improve' (P3)

Multiagency cooperation

With reference to the number of agencies and individuals that work together to meet the needs of clients (as outlined above in 'Additional Programmes'), New Chance workers commented that having these agencies at their disposal is integral to being able to meet the needs of women. One New Chance worker also commented that it was useful to have feedback from other agencies on the progress of a client.

"...they let me know how she's getting on. So, it does work having multi-agencies..." (P3)

The same New Chance worker commented that she had been able to get a client six weeks of bus fare through another agency with whom the client was also receiving support.

'...so we had a multi-agency meeting and I said, "She's struggling to get over here for the courses because of her funds and bus fare", and she said, "I can supply you with six weeks", which is how long the course is, six weeks of bus tickets for that client.' (P3).

Staff skills and attitudes

All staff interviewed had a positive outlook about the New Chance programme. Police staff and New Chance workers alike felt that they had been well trained for their respective roles. New Chance staff had previous experience of working with female offenders and/or vulnerable women and were

knowledgeable regarding the needs of women they support. All New Chance workers expressed a lot of enthusiasm about their work and commented that they enjoyed their roles.

'I love the whole ethos of Anawim, you know, in supporting women, vulnerable women, and, you know, being all about them — and you come across it sort of all the time in your work. It's not just this is what we're saying and we're doing this. It's everybody actually believes what they're doing and saying, you know. And it's all about...all of us, not just the clients, it's about looking after ourselves as well, and I've never worked anywhere where it's been like that before, so I really love it...I think we were both quite enthusiastic and we could both see how it could work, so we just got stuck in straight away really...I really believe in it and I really want it to continue.' (P4)

2.4.4.2 Reflections on the New Chance programme

In addition to the focus on whether, and in what way, the programme is achieving its goals, police and New Chance staff reflected on what they have learnt about women involved in the programme. New Chance workers made reference to what they felt women have benefitted from (in addition to specific one-to-one support) and what they might find helpful (i.e. group work). Both police and New Chance workers expressed their opinions regarding client engagement with the programme (i.e. differences between voluntary participation and conditional cautions, and the difficulties around encouraging women to engage when they aren't *ready* to do so). New Chance workers commented on what they felt to be barriers to the support they can offer; a lack of funds for transport was highlighted as a hindrance, as was a lack of support for clients with mental health needs. New Chance workers also spoke of their thoughts to date on the outcomes they are seeing in the women they work with. Lastly, New Chance workers and police staff made suggestions as to improvements which could benefit clients (i.e. accommodation, funding for transport, mental health support, and group work).

From personal experience

New Chance workers spoke of what they felt women had found helpful with reference to what they feel to be key aspects of the support they provide. New Chance workers also reflected on barriers to them being able to provide effective support. Police staff and New Chance workers alike commented on the issue of programme engagement.

What women find helpful

New Chance workers highlighted that the environment which the clients come to is important to them being able to benefit from the support offered; a safe, calm environment is necessary for women to be able to relax and open up.

'I think it's that place where they can come to, feel safe, em, feel relaxed more than anything, because a lot of them have got really chaotic lives and a lot going on, and just to just have a moment, which I think is massive. So, I think that, I would say, is the biggest benefit to the women, from my experience, is them just knowing that we're here and having that person and that place to come to... So, from my feedback and my personal experience, I think it's that second person that's not involved in the criminal justice system that they can sort of open up to.' (P3)

In addition, it was noted that women will benefit from having someone listen to them in a non-judgemental way and without placing pressure on them to divulge personal details until they feel ready to do so. It was felt that, through giving practical advice, it is possible to give clients the necessary skills with which to function in society.

'...it's not just about penalising them for something. It's recognising that there's been something, recognising that they don't have to talk about it until they're ready to, but giving them ways of dealing with things, practical things that they can do, em, rather than use drugs or offend or, you know, whatever it is they do. It's giving them ways that then they can carry on and function properly in society... you can see very real ways it's helped people.' (P4)

One New Chance worker went further to say that her clients have told her that their crime was a cry for help and they feel that cry is now being recognised and addressed.

'A lot of them do say, "This is a cry for help – this is why I committed this crime", and finally, something's been done about it.' (P3)

Engagement issues

Police staff and New Chance workers alike made reference to the decision of some women to not engage with the programme. It was noted that women must feel ready to engage with the programme and that being ready may be contingent on what is happening in their lives at the time and on whether or not they recognise that they need to change and whether they are willing to take action.

'It's like any offenders that we manage, whether they're female, male, etc., if they're not ready, they're not ready. You can't affect them. They have to be ready and they have to be ready for change.' (P2)

'I think some people have chaotic lives, don't they, and this might not be their priority. You know, there may be other things that they need to prioritise over the appointment to see me, so that's what I find [it is down to]... sometimes people themselves have to recognise, and they may...and certain things may have to happen to them before they get to the point where they recognise that they need to actually do something to make things different for themselves.'

(P5)

There was a general consensus between New Chance workers and police that women who are referred to New Chance with a conditional caution are more likely to engage/attend than those who are under no such obligation to attend. However, it was noted that not all women on conditional cautions will engage (despite the best efforts of New Chance workers) despite knowledge of the consequences.

'So, often, people who are referred with "no further action" tend not to really engage, em, and...because it's no...because they don't have to attend – there's nothing that we can do about that. So, if somebody – although we have our processes for following people up, but if we contact them and they say, "Well, actually, I'm okay, I don't need the service", then that's it, you know. But the ones then that do engage, then obviously we can work with them.' (P5)

Barriers

New Chance workers commented that some women will struggle to attend appointments due to a lack of money for the bus fare to their respective location.

'...it's not fair for us to be saying spend all this money on coming... That is our massive obstacle...I think that I'd say that's a massive barrier that we face at the moment.' (P3)

In addition, it was noted by one New Chance worker that she felt there is not adequate support for clients with mental health issues; she may be aware that a client urgently needs input from a mental health professional but there is no immediate resource to draw upon. The New Chance worker provided an example of the difficulties she has faced in relation to a lack of support for clients with mental health issues.

'I think we're all being told to recognise the issue when there's a mental health problem, eh, and for people to acknowledge it and, eh, and deal with it like an illness, but then there's not the follow-up for it because there's just not the money in it, you know, the back-up for people, you know...I mean, one of my clients has been asking for help, asking for help, asking for help.

In the end, she tried to kill herself and then she got sectioned, you know. And I've taken someone in to try and get sectioned, to try and get her sectioned, and [there will be times] — these are extreme cases obviously, but, em, just because I've sort of got to the point where I didn't know what to do.' (P4)

Outcomes

New Chance staff also reflected on how they have helped clients they have supported. One worker made reference to positive feedback she had received from a client and another spoke more generally about empowering women to cope with challenging current and future situations.

'...she said to me, you know, "If I'd never have met you, I would either be dead" by her own sort of doing or her partner's doing, she said, "or I just be in a really bad place." She said, "I've never been..." I mean, she's gone through a lot the past few weeks, but, em, she...is such a positive person, but she said that she's got that support now that she never had before, that she never had from family, she never had from her partner, she never had from friends. But she's got that person now, so she feels like she can do anything, like leave the relationship, be in temporary accommodation, because she's got that support.' (P3)

'...because you know you're helping them [client] and that you'll move them on from this...this current crappy bit that they're in at the moment. You know, you will get them through it, or you'll help them get through it, or make them empowered enough to know how to get through it and deal with things as they come up in the future, you know.' (P4)

Suggestions

In addition to suggestions regarding referrals (see sub-theme 1.3), staff offered general suggestions regarding improvements that could be made. The police commented that the issue of a lack of housing for vulnerable women was something that needs to be addressed. In addition, a New Chance worker suggested that it is necessary to have additional/immediate support on hand for women who have mental health issues. Furthermore, as noted above, it was suggested that money needs to be made available for women who cannot afford to travel to their respective centres for appointments. Lastly,

two New Chance workers noted that it would be good if women had the opportunity to take part in group work. These opportunities are, however, reliant on there being enough women to form groups; an issue tied in to the need for an increase in the number of referrals.

'I'd want to put them in groups as well, definitely, because of the differences I've seen in other people, but, also, I know a lot of them... I mean, there's one in particular, I've brought her in to meet different people, to talk to her about the groups, so that it's not just my perspective on it, so it might help her then, you know, and people who work here now who were users here in the past, so, you know, just so that she can get lots of different perspectives so it's not just me.' (P4)

'...the only thing I've probably noticed that's lacking is a housing option, because housing is a big...a big issue, em, because of obviously government cuts and things like that. I've had a couple of instances where the female in custody [?] housing obviously if...I don't know, if they've, em, been involved in an incident or it's not suitable to go back because of an incident. It's sometimes difficult, em, other than advice to attend the local council, present homeless. I think that strand of...that trigger of offending or...the housing situation and that support could probably be better.' (P1)

Part B – Quantitative Analysis

In this part, we analyse the impact of data in regards to offenders who have been referred to the New Chances programme.

3.1 Outline of Statistical Methodology

We used data provided to us by West Midlands Police (WMP) to first conduct a descriptive analysis, breaking down the offences committed by each offender referred to the New Chance programme as well as the composition of those referred by age, ethnicity³ and other given factors. This has allowed us to get a better understanding of the offenders' characteristics and offending rates before and after being referred to New Chance. We will refer to this group as the *treatment group*. Reoffending rates for the treatment group were then compared to 'similar' offenders who were not referred to New Chance which we refer to as the *control group*.

The effect of the New Chance intervention on the treatment group will be measured by the difference in the mean outcome measures between the treatment and control group. The outcomes we will focus on are reoffending rates across different time periods and see if it varies between the treatment and control group. However, a direct comparison of mean outcomes across these two groups is likely to give a biased effect of the treatment since the treatment and control groups may differ in their characteristics. To address this, we use a technique, *propensity score matching* (PSM)⁴ which matches the treatment and control groups on their observable characteristics (we will call them co-variates and this includes age, ethnicity, past offending history) so that post-match we can compare the mean outcome(s) of the treatment and the 'matched' control group to identify the impact of the New Chance programme (this is called the average treatment effect). We estimate the average treatment effect of the New Chance programme on reoffending rates.

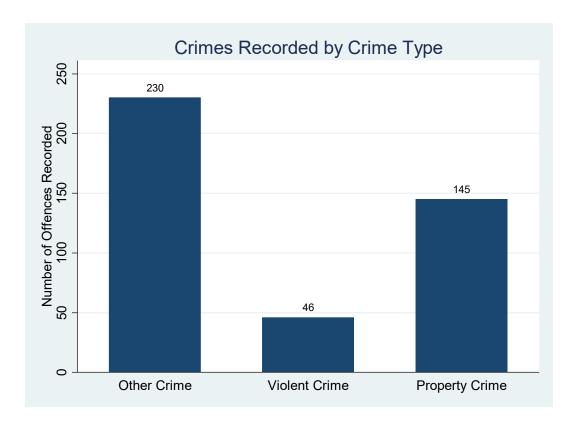
3.2 Descriptive Statistics

3.2.1 Crime Numbers and Types

³ The data provided uses the term 'ethnical appearance'.

⁴ For more details of this technique, see Rosenbaum, P.R., & Rubin, D.B (1983). "The central role of propensity score in observational studies for causal effects". *Biometrika* 70(1), 41-55.

In our treatment group, there were a total of 421 referrals from June 2016 to January 2020. In the 12 months prior to the referral date, the average number of offences per offender was 3.2 (ranging from 0 to 7). Total offending history (based on police records) was higher and the average number of offences per offender was 13.8 (ranging from 1 to 78). From crime descriptions given to the index offence after which referral was made, we classified each offence (based on the description) into three broad categories: Violent Crime, Property Crime and Other Crime. Violent Crime includes offences where violence, robbery, assault, wounding with intent and causing bodily harm were mentioned. Property Crime includes all offences where theft, burglary and shoplifting are mentioned. And the rest are classified as Other Crime. Categories were created by utilising word search commands on STATA on the offence variable provided in the dataset. Graph 1 below illustrates the distribution of crime types:



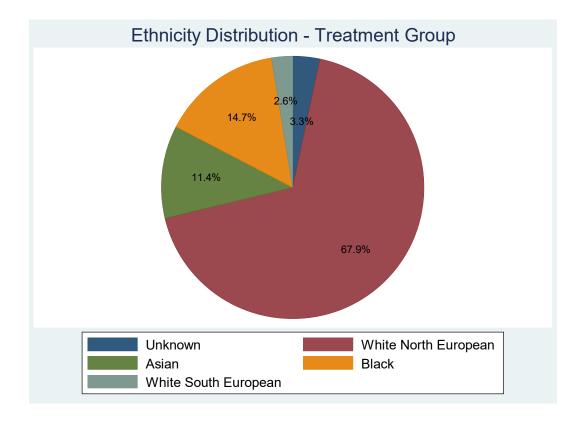
Graph 1

Just over half of all recorded offences were identified as other crimes, 34% were property crimes and 11% were violent crimes.

We now describe offender characteristics.

3.1.2 Ethnicity

Graph 2 below illustrates the distribution of ethnicity of the offenders who received the treatment:

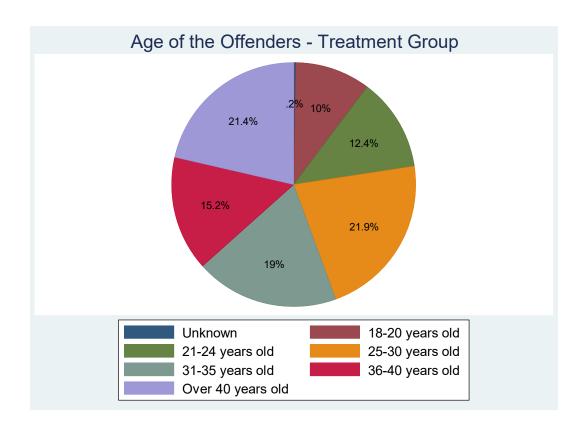


Graph 2

Around two thirds of the total offenders were identified as White North Europeans.

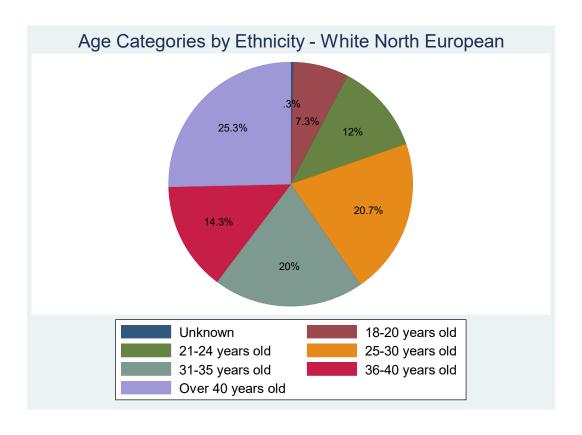
3.1.3 Age

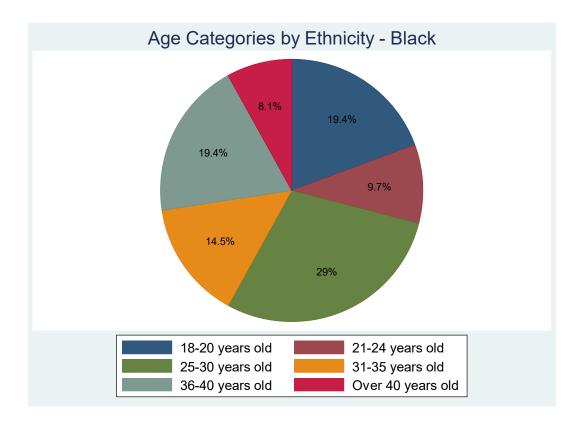
Mean age of the offenders (when referred to the New Chance) was just over 33 years of age. The youngest offender recorded was aged 18 and the oldest one was aged 76. The age distribution is presented in Graph 3 below.



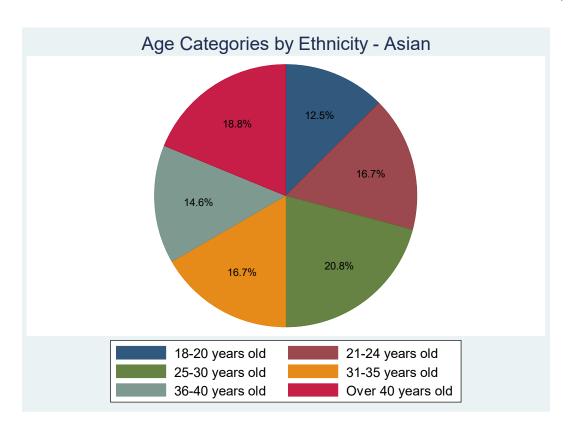
Graph 3

Graph 5, 6 and 7 illustrates age categories by the three main ethnicities identified in the treatment group:





Graph 5

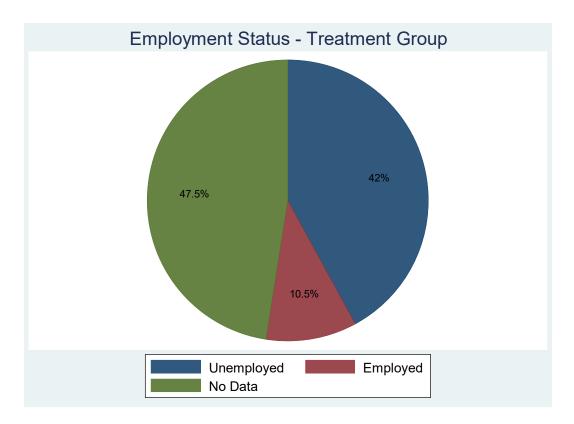


Graph 6

Women under 30 formed less than half the referrals for White North European group, more than half for Black and half for Asian groups.

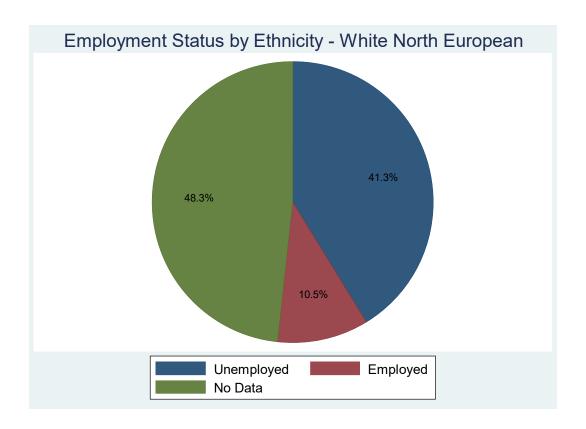
3.1.4 Employment Status

42% were unemployed, 10% were employed and for the rest there were no data in regards to their employment status. Graph 7 illustrates.

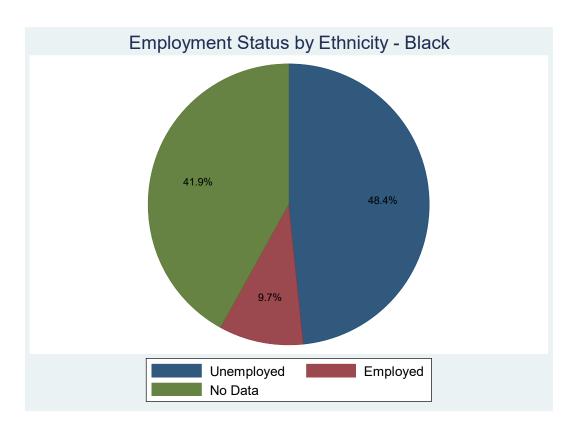


Graph 7

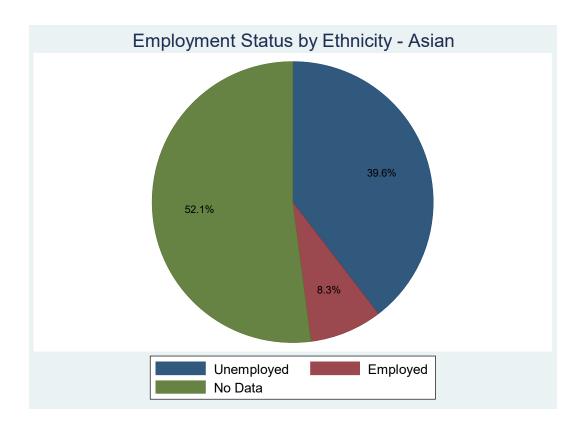
Graphs 8, 9 and 10 illustrate employment status by three main ethnicities in the treatment group.



Graph 8



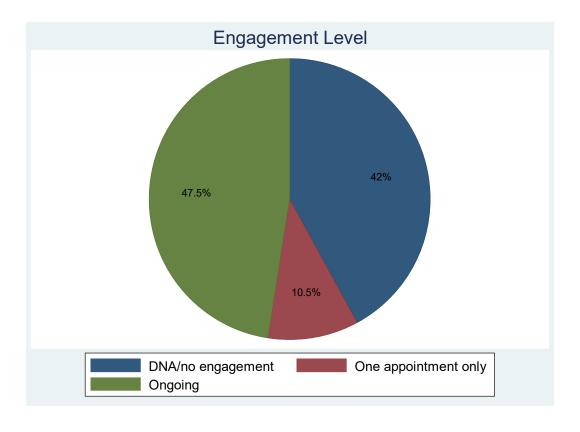
Graph 9



Graph 10

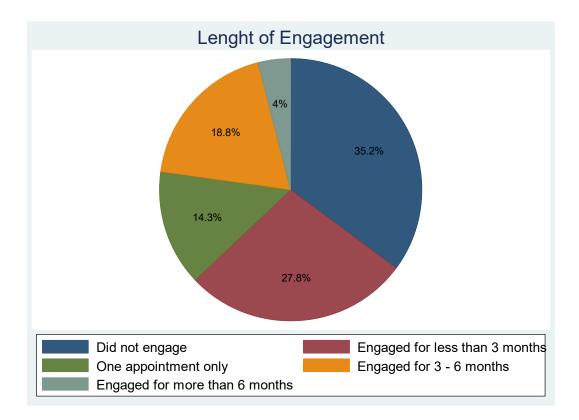
3.1.5 Treatment – Engagement Level and Length of Engagement

For most women (47.5%) referred to the New Chance programme their engagement level was identified as ongoing and 42% did not engage and the remaining 10.5% had one appointment only.



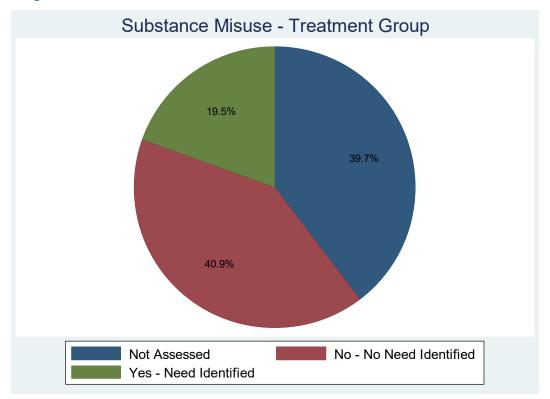
Graph 11

Length of the engagement also varied across all offenders:



Around half of all women referred did not engage in the treatment or only attended one appointment and 4% engaged for more than 6 months.

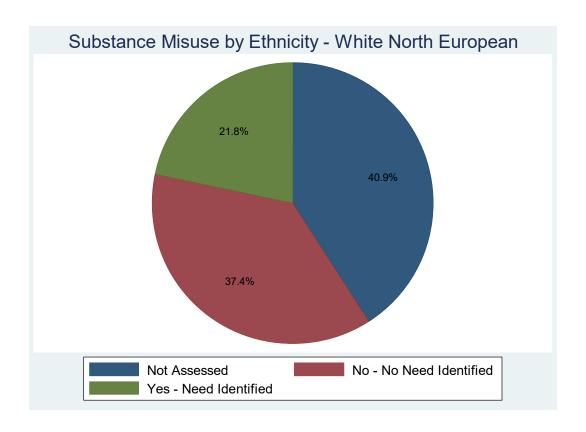
3.1.6 Drugs/Alcohol Misuse identified



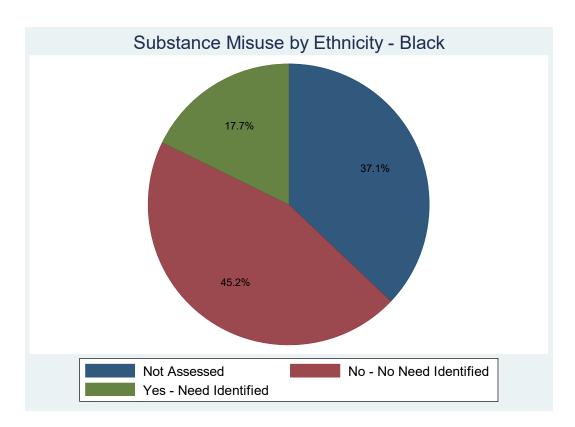
Graph 13

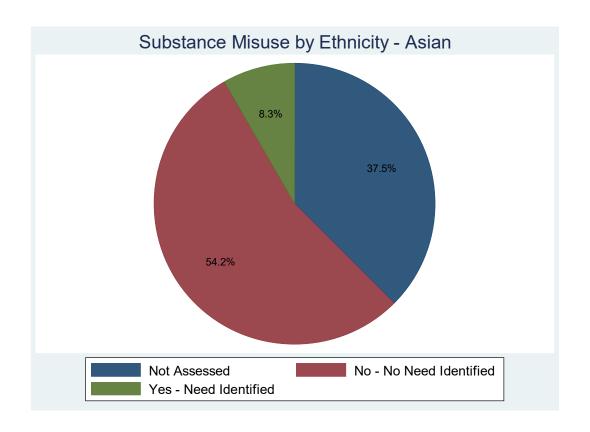
Just under 20% of women referred had alcohol/drugs misuse problem identified and almost 40% of referrals were not assessed for this.

Graphs 14, 15 and 16 illustrate alcohol/drugs misuse problem identification by the three main ethnicities in the treatment group.



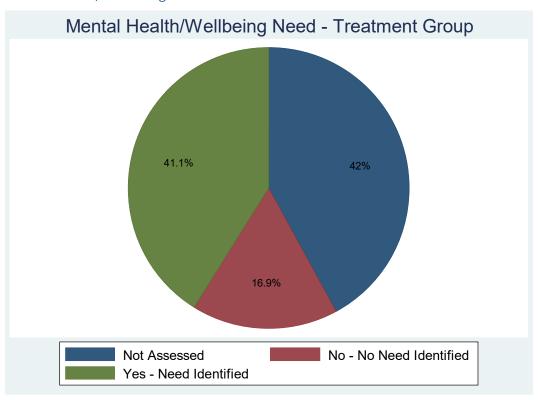
Graph 14





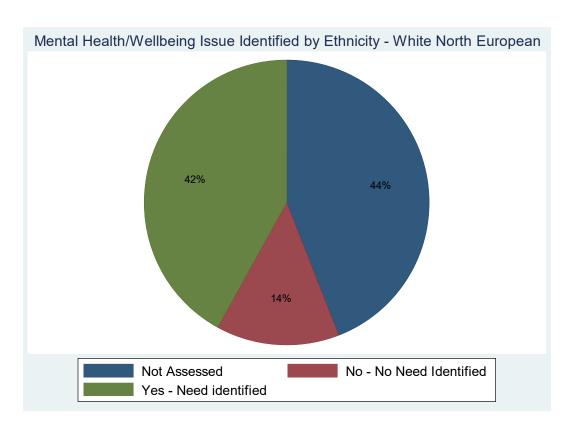
Graph 16

3.1.7 Mental Health/Wellbeing issues identified

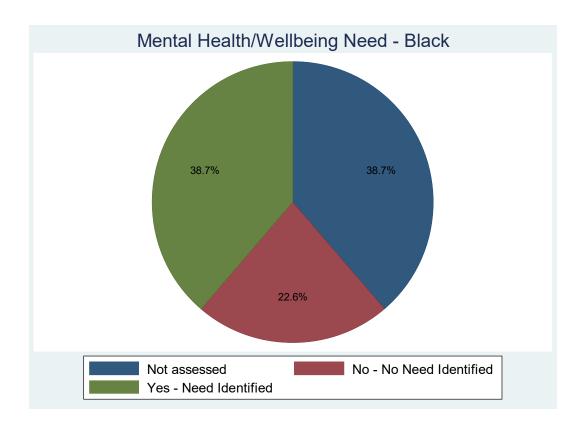


For over 41% of all women referred, mental health/wellbeing issue was identified. 42% referrals were not assessed for this.

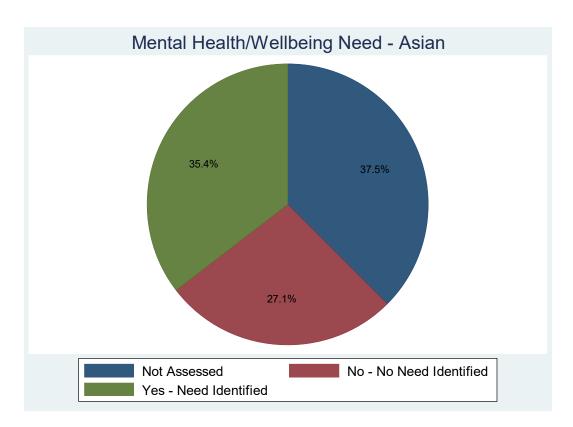
Graphs 18, 19 and 20 illustrate mental health/wellbeing need identification by the three main ethnicities in the treatment group.



Graph 18



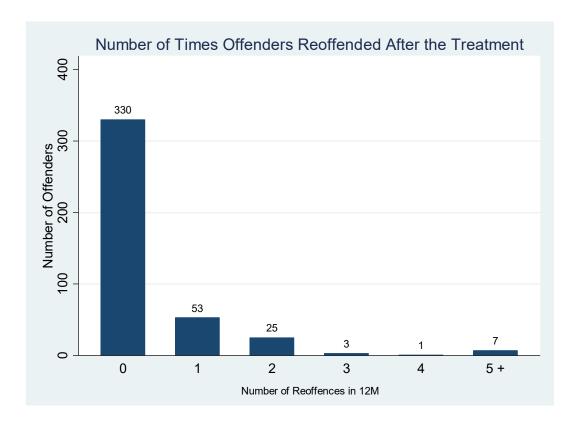
Graph 19



Graph 20

3.3 Reoffending

We are interested in the effect the treatment had on reoffending rates for those who received it. We start by presenting reoffending rates, the frequency of reoffending and reoffending across different sub-groups. 91 offenders (22%) reoffended after the treatment, Graph 21 below shows the frequency of reoffending up to 12 months after the referral (the total sample size of N=421 is used, but given the different dates of entry into the programme, not everyone was followed up for 12 months):



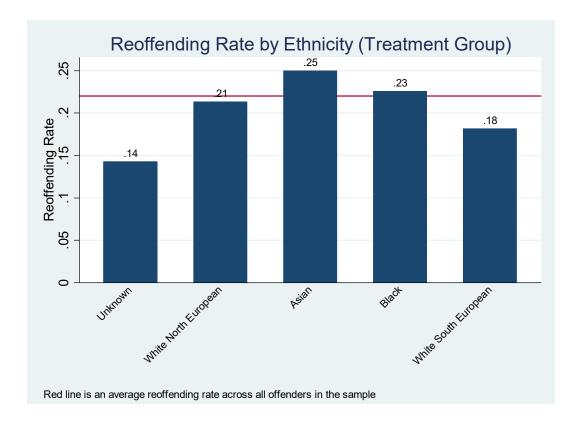
Graph 21

Before/after analysis: Most offenders did not reoffend after the treatment but some reoffended multiple times. On average, there were 3.20 offences per offender in one year before treatment and 2.95 offences 12 months after (the difference of 0.25 was statistically significant at 5% level⁵). For the sample of those who could be followed up for 12 months (N = 247), the difference was 0.32 (3.20 before and 2.88 after) which was also statistically significant.

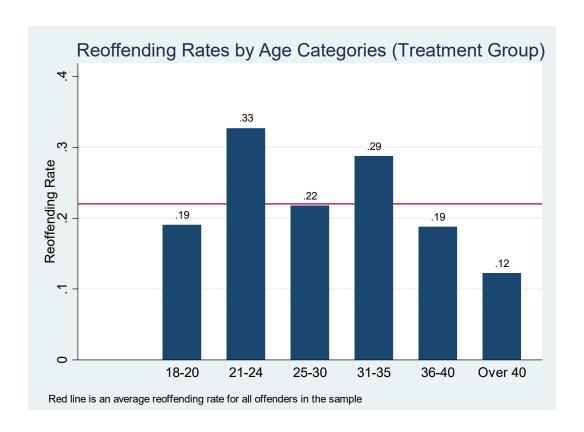
Below, we illustrate reoffending rates (how many offenders committed at least one offence after the referral to the New Chance programme by ethnicity (Graph 22), by age categories (Graph 23), by employment status (Graph 24), by substance misuse (Graph 25) and mental health wellbeing (Graph

⁵ Unless indicated otherwise all statistical significance is at 5% level.

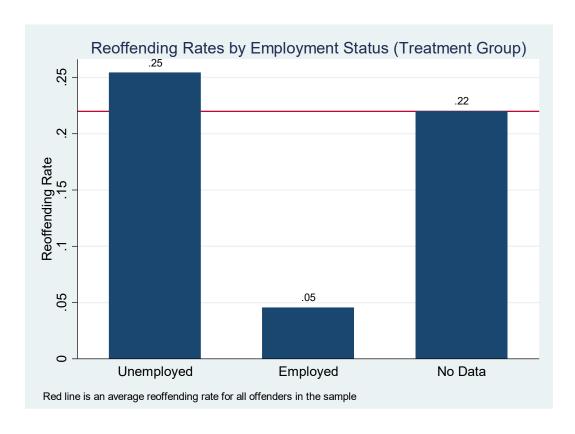
26). Graph 30 and 31 respectively illustrate reoffending rates by engagement length and level. All graphs have a red line illustrating the average reoffending rate for all offenders (i.e. total number who reoffend/total number of offenders on the programme) which is 22%. This allows us to see if reoffending was higher or lower compared to the average for offenders with certain characteristics.



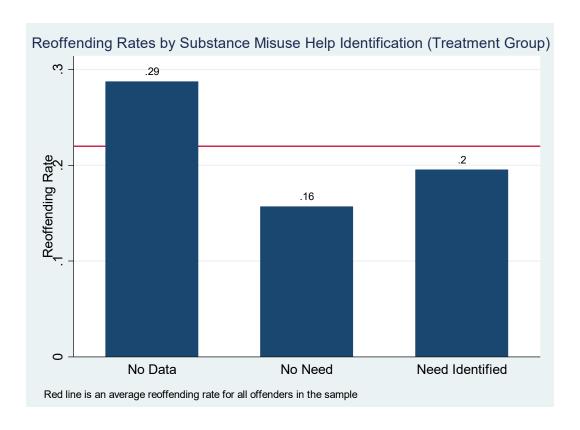
Graph 22



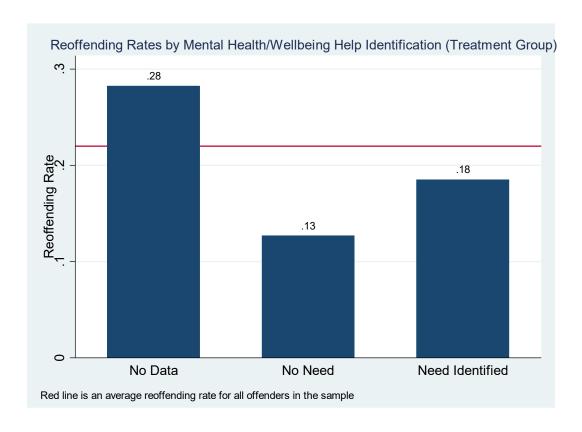
Graph 23



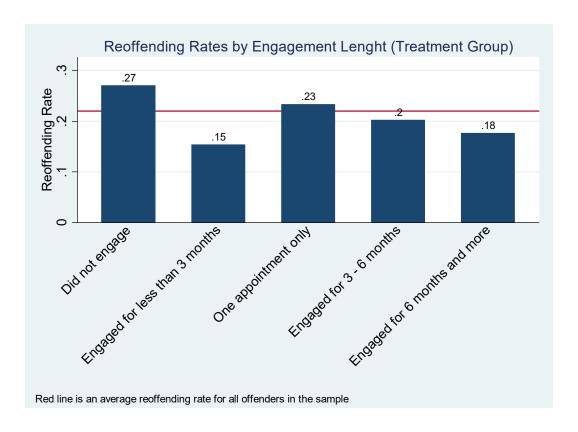
Graph 24



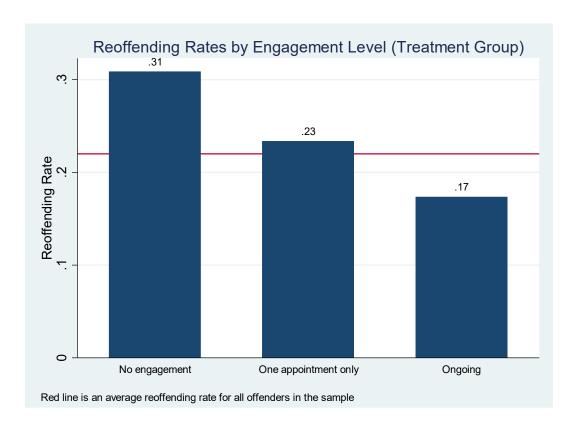
Graph 25



Graph 26



Graph 27

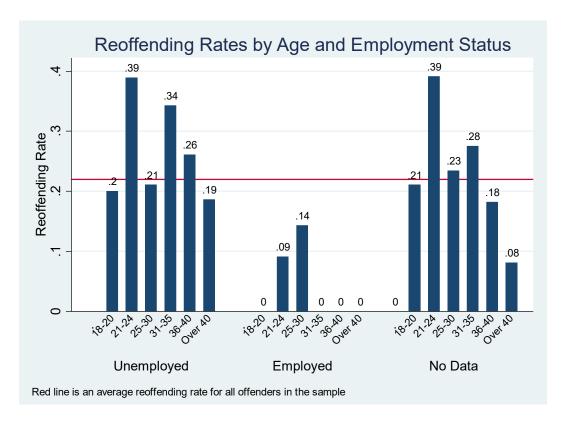


Graph 28

Overall, reoffending was higher than average for the following groups⁶:

- Women who were classified as Asian and Black
- Women aged 21 24 and 31 35
- Women who were unemployed
- Substance and MH issues higher reoffending when need is identified but there is a problem with missing data for many referrals, those with no data had the highest rates of reoffending
- Women who did not engage or only attended one appointment and showed no engagement

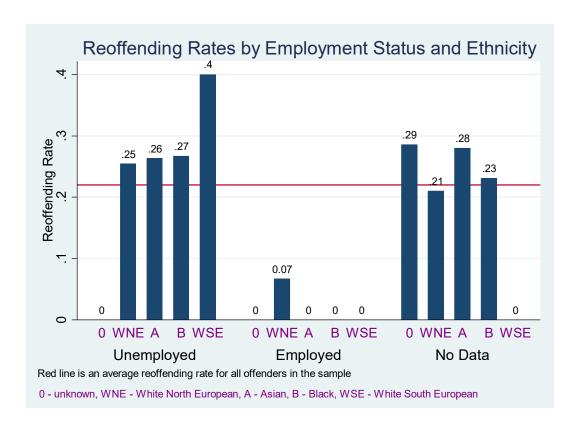
Graphs 29 and 33 illustrate reoffending rate by age and employment status and employment status and ethnicity.



Graph 29

⁻

 $^{^{6}}$ This has no causal interpretation and the differences (except for employment status) are statistically insignificant (see 1.4.1)



Graph 30

3.4.1 Significance in differences in reoffending rates across groups

We tested for statistical significance in differences in reoffending rates across groups with two variables. We separated all variables to be binary as following: White (0) and Non-White for Ethnicity (1), "age <25" (0) and "age >=25" (1) for Age, Employed (0) and Unemployed (1) for Employment Status, No Need (0) and Need Identified (1) for Mental Health and Wellbeing and No Need (0) and Need Identified (1) for Substance Misuse.

Results are as described below:

<u>Difference in reoffending for Ethnicity</u>: 2.8% (offenders identified as White reoffended less on average), statistically insignificant (N = 408)

<u>Difference in reoffending for Age</u>: 6.1% (offenders aged less than 25 reoffended more on average), statistically insignificant (N = 421)

<u>Difference in reoffending for Employment Status</u>: 20.9% (offenders who were employed reoffended less on average), statistically significant at 5% level (N = 221)

<u>Difference in reoffending for Mental Health</u>: 5.9% (offenders who had No Need identified for Mental Health and Wellbeing reoffended less on average), statistically insignificant (N = 244)

<u>Difference in reoffending for Substance Misuse</u>: 4.1% (offenders who had No Need identified for Substance Misuse reoffended less on average), statistically insignificant (N = 254)

<u>Difference in reoffending for those who engaged vs those who did not</u>: 11% (offenders who engaged reoffended less on average), was statistically significant (N = 421). Analysis of engagement length for the same sample showed that reoffending rates were 26% who did not engage or attended one appointment only and 17% for those who engaged for longer (up to 3 months, 3-6 months and more than 6 months) and the difference of 9% was statistically significant.

3.4 Propensity Score Matching

In this section, we compare reoffending across treatment and control groups using Propensity Score Matching.

Treatment and Control group data: We used data provided to us by WMP for the control group offending history and reoffending. We cleaned the data and created a variable for crime type and by doing a similar word search categorised all offences into Violent Crimes, Property Crimes and Other Crimes. For the control group, we identified their 'start' date as the first offence recorded between 6 May 2015 and 31 May 2015 and then calculated the days in between their start date and reoffence date. This allowed us to compare reoffending across both files for similar time periods, i.e. a follow up period of 30 days, 60 days, 90 days, 6 months and 12 months from the first offence from which we are measuring reoffending. We created a binary variable for marker for substance misuse and mental health issues. We also re-categorised Ethnicity and Employment status across treatment and control Files in the same way allowing us to merge the data together. Also, the control group contained data on girls under 18 years old which we deleted as the intervention was only for those aged 18 and above.

For the treatment group, we deleted referrals from January 2020 due to insufficient follow up time and three entries where reoffending date was earlier than the referral (index) offence date or reoffending status was unknown.

Our 'Treatment and Control Joint Data File' contains 772 observations (of offenders) – 410 treatment group observations and 362 for control group. 251 offenders (32.5%) committed another offence

during their observational period. Reoffending for the treatment group was 22.0% and for the control group it was 44.5%. The difference of 22.5% was statistically significant at 1% level.

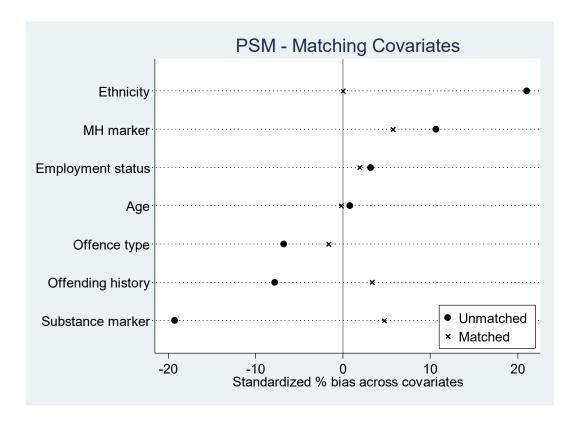
However, comparing the reoffending rates across treatment and control groups can be biased and not capture the real differences between the groups. The decision to reoffend in the future can be influenced by many factors for each offender, therefore, we use Propensity Score Matching (PSM) as described earlier to match control and treatment Groups. Recall that this method allows us to form a Matched Control Group from our control file observations which is statistically similar to the group which received the treatment. We can compare the reoffending rates between treatment and control group after matching and analyse if receiving treatment had any effect on recidivism outcomes. We use six covariates for matching – offender's age group, employment status (Unemployed (0) and Employed (1) or No data), ethnicity (White (0), Non-White (1)), offence type (Other Crime (1), Violent Crime (2) and Property crime (3)), mental health issue marker (No/Not assessed(0), Yes (1)), substance misuse issue identified (No/Not assessed (0), Yes (1)) and total known offending history (number of all known offences by the offender to police).

Means of matched and unmatched groups are presented on the left hand side of Table 1 and we can see how close the characteristics between treatment and control groups are after matching compared to without matching. Before matching, there were differences in background factors between offenders who were selected for the New Chance intervention and the ones who were not. For example, before matching offenders who were subject to New Chance intervention were less likely to have a substance misuse issue identified than ones in the control group. After matching, the two groups became much more similar in their characteristics. An important step in any PSM analysis is to assess the balance of the measured covariates between the treatment and control groups, where balance refers to the similarity of the covariate distributions. We use a quantity similar to the effect size, known as the standardized bias, to quantify this balance. The standardized bias for covariates is calculated by dividing the difference in means of the covariate between the treated group and the comparison group by the standard deviation. On the right of the Table 1, the standardised bias after matching satisfies the recommended condition i.e. to be under 5% for all apart MH marker which is 5.7%. Also, t-tests demonstrate that all the differences between the co-variates after matching were insignificant.

Table 1: Matching	hing Results Comparing Treatment and Control Samples on Chosen Covariates				
N	1ean				
U	Inmatched	Matched		t-test	

	Treated	Control	Treated	Control	%bias	t	p> t
Age	33.04	32.96	33.15	33.17	-0.2	-0.02	0.98
Ethnicity	0.30	0.21	0.29	0.29	0.0	0.00	1.00
Substance Marker	0.25	0.34	0.25	0.23	4.7	0.54	0.59
MH marker	0.47	0.42	0.47	0.44	5.7	0.62	0.54
Employment	0.29	0.28	0.29	0.29	1.9	0.20	0.84
Offence Type	1.77	1.83	1.78	1.79	-1.6	-0.18	0.86
Offending History	23.23	24.88	23.37	22.66	3.3	0.37	0.72

Graph below illustrates how matching made a difference to Control and Treatment Groups after matching:



Graph 31

We can see that that once matched, most covariates are much closer together – the black dots show the standardised bias across covariates before matching and the crosses show the same after the

matching. We can see that after matching, it became much closer to zero on most covariates indicating that the groups are much more statistically similar.

1.4.1 Results

After matching Control and Treatment Groups, we use a one-to-one nearest-neighbour matching method (i.e. each person in the treatment group was matched to the person closest to her in the control group) with replacement (allowing for someone in the control group to be matched with more than one person in the treatment group) to calculate the average treatment effect of being referred to New Chance Programme on reoffending rates. Table 2 below shows our findings on overall reoffending and follow up of 30, 60, 90 days and 6 and 12 months (matching illustrations are provided in Appendices):

Variable	Sample	Treated	Control	Difference	S.E.	T-stats
Reoffending						
total						
(full sample, N						
= 772)						
	Before Matching	0.23	0.44	-0.21*	0.04	-5.40
	After Matching	0.23	0.38	-0.16*	0.05	-3.48
Reoffending						
within 30 days						
(Treatment file						
up to 10 th						
December						
2019, N = 769)						
	Before Matching	0.03	0.08	-0.05*	0.02	-2.30
	After Matching	0.03	0.07	-0.03	0.02	-1.34
Reoffending						
within 60 days						
(Treatment file						
up to 10 th						
November						
2019, N = 758)						

	Before Matching	0.06	0.14	-0.09*	0.03	-3.33
	After Matching	0.06	0.13	-0.07*	0.03	-2.43
Reoffending						
within 90 days						
(Treatment file						
up to 10 th						
October, N =						
742)						
	Before Matching	0.10	0.18	-0.08*	0.03	-2.66
	After Matching	0.09	0.13	-0.04	0.03	-1.16
Reoffending						
within 6						
months						
(Treatment file						
up to 10 th July,						
N = 710)						
	Before Matching	0.13	0.26	-0.13*	0.03	-3.71
	After Matching	0.13	0.24	-0.11*	0.04	-2.77
Reoffending						
within 12						
months						
(Treatment file						
up to 10 th						
January, N =						
610)						
	Before Matching	0.20	0.33	-0.12*	0.04	-2.8
	After Matching	0.20	0.31	-0.11*	0.05	-2.17

Note: * Indicates statistical significance of at least 5% level (two tail t test at .05 level)

If we were to compare overall reoffending across control and treatment Groups without matching, the difference is 21%. After matching, the difference in overall reoffending rate between treated and control groups is 16% and is still statistically significant. We also look at differences in reoffending (after matching) across different time periods. The difference in reoffending within 30 days is 3% but is not statistically significant. The difference in reoffending within 60 days between treatment and control groups is 7% and is statistically significant. Longer term follow up of 6 and 12 months also show that

there was a significant reduction in reoffending rates of 11%. These findings suggest that the New Chance intervention had a positive effect on offenders in terms of reducing their reoffending rates in the short and long term.

1.4.2 Robustness checks: Sub-group analysis

We test if the intervention has an impact across different sub categories of offenders. Therefore, we also ran PSM analysis on samples of unemployed only (N = 415), by ethnicity, for Whites only⁷ (N = 573), by MH marker (N = 325) and by substance misuse marker (N = 208). We looked at the differences between treatment and control groups on total reoffending and reoffending within 6 and 12 months⁸.

Table 3: Average	Treatment Effect: Prop	ensity Score	Matching - s	ubsamples		
Variable	Sample	Treated	Control	Difference	S.E.	T-stats
Reoffending						
total						
(Unemployed						
only, N = 415)						
	Before Matching	0.26	0.53	-0.27*	0.05	-5.62
	After Matching	0.26	0.45	-0.19*	0.06	-3.14
Reoffending						
within 6						
months						
(Unemployed						
only, N = 399)						
	Before Matching	0.26	0.53	-0.27*	0.05	-5.46
	After Matching	0.26	0.46	-0.20*	0.06	-3.33

-

⁷ The sample for other ethnicities was too small to run a PSM analysis

⁸ Due to smaller sample sizes we had to match on less covariates than in the main analysis, as a result, unemployed sample was matched on age, ethnicity, substance misuse maker, MH marker and offence type; sample with white women only was matched on age, employment, MH marker and substance misuse marker; sample with a present MH issue where MH marker = 1 was matched on age, employment, ethnicity and substance misuse; and sample with a present substance misuse issue where substance misuse marker = 1 was matched on age, ethnicity, offending history and offence type.

Reoffending						
within 12						
months						
(Unemployed						
only, N = 351)						
	Before Matching	0.27	0.53	-0.26*	0.06	-4.67
	After Matching	0.27	0.43	-0.16*	0.06	-2.51
Reoffending						
total						
(White only by						
Ethnicity, N =						
573)						
	Before Matching	0.21	0.49	-0.28*	0.04	-7.35
	After Matching	0.21	0.40	-0.19*	0.08	-2.28
Reoffending						
within 6						
months						
(White only by						
Ethnicity, N =						
529)						
	Before Matching	0.21	0.49	-0.28*	0.04	-6.97
	After Matching	0.21	0.42	-0.21*	0.08	-2.63
Reoffending						
within 12						
months						
(White only by						
Ethnicity, N =						
458)						
	Before Matching	0.22	0.49	-0.26*	0.05	-5.81
	After Matching	0.23	0.47	-0.24*	0.08	-2.84
Reoffending						
total (MH						
marker 'Yes', N						
= 325)						

	Before Matching	0.19	0.66	-0.47*	0.05	-9.68
	After Matching	0.19	0.57	-0.37*	0.07	-5.64
Reoffending						
within 6						
months (MH						
marker 'Yes', N						
= 299)						
	Before Matching	0.20	0.66	-0.46*	0.05	-8.92
	After Matching	0.20	0.57	-0.37*	0.06	-5.59
Reoffending						
within 12						
months (MH						
marker 'Yes', N						
= 253)						
	Before Matching	0.20	0.66	-0.46*	0.06	-7.81
	After Matching	0.20	0.55	-0.35*	0.07	-4.88
Reoffending						
total						
(Substance						
misuse marker						
'Yes', N = 208)						
	Before Matching	0.20	0.79	-0.59*	0.06	-10.23
	After Matching	0.22	0.76	-0.55*	0.07	-7.71
Reoffending						
within 6						
months						
(Substance						
misuse marker						
'Yes', N = 193)						
	Before Matching	0.21	0.79	-0.58*	0.06	-9.28
	After Matching	0.23	0.76	-0.53*	0.08	-6.86
Reoffending						
within 12						
months						

(Substance						
misuse marker						
'Yes', N = 175)						
	Before Matching	0.20	0.79	-0.58*	0.07	-8.41
	After Matching	0.21	0.72	-0.51*	0.09	-5.90

Note: * Indicates statistical significance of at least 5% level (two tail t test at .05 level)

The findings in Table 3 above show that the effects of the intervention are highly significant (i.e. crime reducing) on the sample of Unemployed women as well as on those who were identified as White. They all show a reduction of 26-28% in reoffending as a result of the intervention which is statistically significant. The reduction in reoffending for women who were facing MH issues is 35-37% and it is statistically significant. Women who had substance misuse issues identified had a 51-55% decrease in reoffending as a result of intervention. These findings suggest that the New Chance intervention would likely have had a positive effect on offenders' MH and provided suitable help for their substance misuse problems, which then had a positive effect on the offenders' criminal behaviour.

3.5 Conclusion

An impact evaluation of the New Chance programme showed a significant drop in overall re-offending as well as reoffending across 60 days, 6 and 12 months for offenders who were supported by the programme compared to a matched control group. This effect is confirmed across a number of subgroups. The impact was particularly strong for those with MH markers or substance abuse. Given the direct cost of prison as well as its criminogenic effect, there has been interest in such whole system approaches. Our results indicate that this particular programme is effective and we would encourage the collection of cost data to gauge its cost effectiveness.

APPENDICES:

Appendix 1: Client interview questions

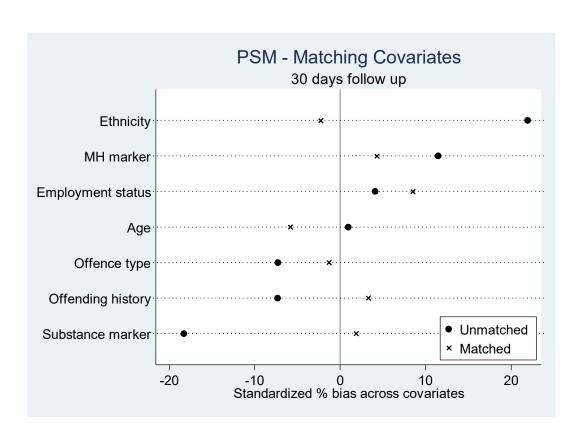
- What has been your experience of the New Chances scheme?
- What has been good about it?
- Is there anything that didn't go so well?
- Is there anything you would change about how it is run?
- Is there anything else you would like to say about the New Chances scheme?

Appendix 2: Staff interview questions

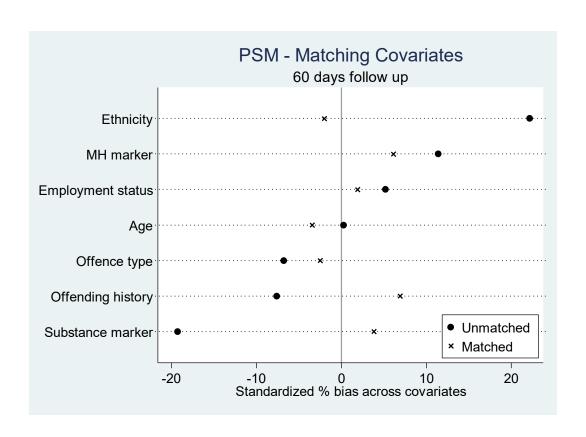
- What has been your experience of delivering the New Chances scheme?
- Have there been any changes made in how it is being delivered since it started?
- How do you think the scheme can benefit women who are enrolled on it?
- Do you think it is achieving its goals at the moment?
- Does it work as well for all women?
- What is good about the scheme? What about it works well?
- Is there anything that hasn't gone so well?
- Is there anything you would change about how it is run or delivered?
- Is there anything else you would like to say about the New Chances scheme?

Appendix 3: 30 days follow up

	Mean						
	Unmatched		Matched			t-test	
	Treated	Control	Treated	Control	%bias	t	p> t
Age	33.10	32.96	33.16	33.78	-5.8	-0.60	0.55
Ethnicity	0.30	0.21	0.29	0.30	-2.3	-0.23	0.81
Substance Marker	0.25	0.34	0.26	0.25	1.9	0.21	0.83
MH marker	0.48	0.42	0.47	0.45	4.3	0.46	0.64
Employment	0.30	0.28	0.30	0.26	8.5	0.93	0.36
Offence Type	1.76	1.83	1.77	1.78	-1.3	-0.14	0.89
Offending History	23.34	24.88	23.48	22.79	3.3	0.36	0.72



	Mean						
	Unmatched		Matched			t-test	1
	Treated	Control	Treated	Control	%bias	t	p> t
Age	32.98	32.96	33.09	33.45	-3.4	-0.35	0.73
Ethnicity	0.30	0.21	0.30	0.30	-2.0	-0.20	0.84
Substance Marker	0.25	0.34	0.25	0.23	3.8	0.43	0.67
MH marker	0.48	0.42	0.47	0.44	6.1	0.65	0.51
Employment	0.30	0.28	0.30	0.30	1.9	0.20	0.84
Offence Type	1.77	1.83	1.78	1.80	-2.5	-0.27	0.79
Offending History	23.28	24.88	23.42	21.97	6.9	0.76	0.45



	Mean						
	Unmatched	d	Matched	Matched		t-test	
	Treated	Control	Treated	Control	%bias	t	p> t
Age	32.96	32.96	33.07	32.51	5.3	0.55	0.58
Ethnicity	0.30	0.21	0.29	0.28	2.4	0.24	0.81
Substance	0.25	0.34	0.25	0.25	1.0	0.11	0.91
Marker							
MH marker	0.48	0.42	0.47	0.47	0.3	0.03	0.98
Employment	0.30	0.28	0.31	0.32	-3.6	-0.37	0.71
Offence	1.76	1.82	1.77	1.80	-3.0	-0.33	0.74
Туре							
Offending	22.95	24.88	23.08	22.17	4.4	0.48	0.63
History							

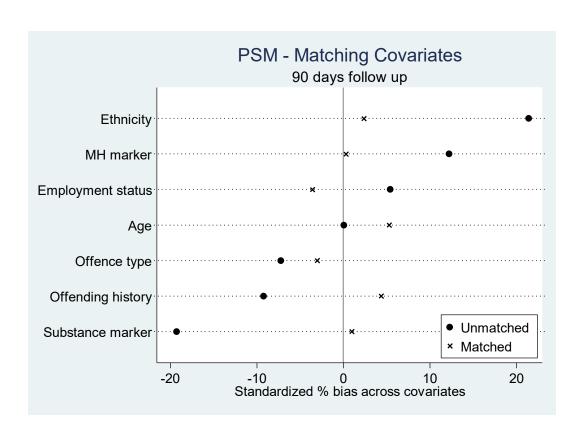
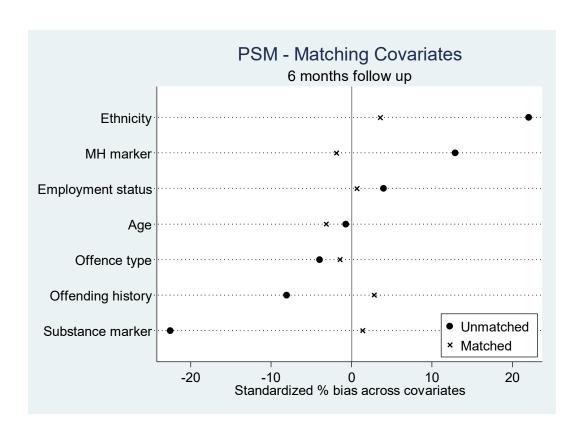


Table A4: Matching Results Comparing Treatment and Control Samples on Chosen Covariates – 6 months follow up, N = 710Mean Unmatched Matched t-test Treated Control Treated Control %bias p>|t| 33.35 0.75 32.89 32.96 33.03 -3.2 -0.32 Age .30 0.29 3.6 0.36 0.72 Ethnicity 0.21 0.28 Substance 0.25 0.34 0.24 0.23 1.4 0.15 0.88 Marker 0.48 0.42 0.48 0.49 -1.9 0.85 MH marker -0.19 **Employment** 0.29 0.28 0.30 0.30 0.7 0.07 0.94 Offence 1.79 1.82 1.80 1.81 -1.4 -0.15 0.88 Type Offending 23.19 24.88 23.39 22.80 2.8 0.30 0.76 History



Appendix 7: 12 months follow up

	Mean						
	Unmatched	d	Matched	Matched		t-test	
	Treated	Control	Treated	Control	%bias	t	p> t
Age	32.1	33.0	32.2	31.9	2.7	0.23	0.82
Ethnicity	0.32	0.21	0.32	0.31	1.6	0.13	0.90
Substance Marker	0.26	0.34	0.26	0.24	5.0	0.45	0.65
MH marker	0.49	0.42	0.48	0.47	2.3	0.19	0.85
Employment	0.29	0.28	0.29	0.33	8.2	-0.75	0.45
Offence Type	1.85	1.83	1.86	1.78	8.2	0.71	0.48
Offending History	24.12	24.88	24.16	24.03	0.7	0.06	0.96

