Sociology and Criminology-Open Access

Breckin, Social Crimonol 2018, 6:2
DOI: 10.35248/2375-4435.18.6.192

Review Article Open Access

How can Conditional Cash Transfers Diminish Crime? An Application of Travis Hirschi's Social Control Theory

Breckin E*

Peace Studies and International Development, The University of Bradford, UK

Abstract

Recent literature has taken an interest in the potential of conditional cash transfer (CCT) poverty reduction programmes to alleviate crime. Whilst literature continues to grow, results have been inconsistent with variations in the impact recorded. Although the literature has continued to debate if a relationship exists between CCTs and crime, it fails to demonstrate how these programmes might impact crime. Utilising Social Control Theory, the paper demonstrates how CCT programmes can facilitate crime reduction by strengthening social bonds. Drawing on the research, evidence is examined for each social bond, thus demonstrating the potential for CCTs to diminish crime. This paper concludes that further research is needed to give credence to the application of Social Control Theory but by applying the theory to CCTs it offers the first theoretical understanding of relationships between CCTs and crime.

Keywords: Criminology; Social control theory; Crime; Cash transfers; Crime prevention; Travis Hirschi; Social protection

Introduction

Since inception in the 1990s in Latin America, Conditional Cash Transfer (CCT) programmes have become the latest policy to be viewed as a 'silver bullet' in fighting global poverty and inequality. The programmes aim to reduce intergenerational transmission of poverty by attaching conditions to monetary transfers, such as mandatory school attendance, in order to invest in human capital. The general consensus is that they have had numerous positive socio-economic effects [1]. Now that some of the programmes have operated for over two decades, interest has begun to focus upon the impacts they have outside their explicit objectives. One recent area of interest and the specific interest of this paper is the potential of CCTs to decrease violent crime. Whilst research is growing into the potential relationship between CCTs and crime, the mechanisms for understanding *how* rather than *if* CCTs impact crime have been neglected [2].

The empirical evidence linking CCTs and crime maybe in its infancy; however a number of scholars are of the opinion that a link does exist [2-4]. The first CCT programme to be evaluated from the perspective of crime was the *Bolsa Familia* programme in Brazil; Loureiro [5] found the income boost from receiving the cash transfer reduced the necessity to commit crime. But the findings suggested that this related to property crime only, and there was no significant influence on violent crimes. A common feature in the empirical studies is a concentration on the economic incentives of crime and how the cash transfer may eliminate this motivation. CCTs alleviated inequality and consequently decreased crime attributed to 'envy effect' which follows when inequality is visibly unjust and therefore motivates perpetrators [4]. Interpretation of the impact of CCTs on inequality as the mechanism through which they could alleviate crime [6]. This however is questionable whilst the link between inequality and crime remains tenuous [7]. The first study to consider other mechanisms was that of Camacho and Mejia [3] who analysed the Colombian CCT and suggested the incapacitation effect was an alternative explanation. This suggests that compulsory education enforced by the conditionalities in the programmes prevents adolescents from committing crime. They failed to find any evidence that this occurred in Colombia. However they utilised school vacations as their data, and this potentially failed to appreciate how school could impact adolescent decision making outside school hours.

The first study to find significant impacts on crime was that of Lance [2] who analysed homicide rates and CCT enrolment, and found an impact in Mexico and Brazil. This was supported by Chioda et al. [8] who found a 6.5% decrease in crime due to the CCT programme in Brazil. Crost et al. [9] also found a positive effect of the Philippine 4P programme on crime related to insurgencies. However, the evidence has failed to present any rationale explaining why and how this happens. Indeed Lance [2] acknowledged in his study of CCTs and violent crime that his work failed to identify the mechanisms that explained his positive findings.

Social Control Theory

Travis Hirschi's Social Control Theory [10] could be helpful in demonstrating how CCTs can facilitate violent crime prevention. Hirschi's theory begins with the proposition 'delinquent acts result when an individual's bonds to society is weak or broken' (1969, p: 16), and it has since become one of the most influential and widely applied perspectives on delinquency in criminology [11]. An important caveat which makes social control theory so appealing over other criminological theories is it asks 'why we *don't* commit crime' rather than 'why we *do*'; and consequently it suggests a rationale for how CCTs can be involved in crime prevention since the effectiveness of the social bonds which cause us to refrain from crime are dependent on their strength which can be weakened resulting in higher propensity to commit crime or strengthened resulting in lower propensity.

Hirschi proposed that people commit crimes because of a weak bond

***Corresponding author:** Breckin E, Peace Studies and International Development, The University of Bradford, UK; Tel: 00447932984879; E-mail: e.breckin@student.bradford.ac.uk

Received August 31, 2018; **Accepted** September 10, 2018; **Published** September 17, 2018

Citation: Breckin E (2018) How can Conditional Cash Transfers Diminish Crime? An Application of Travis Hirschi's Social Control Theory. Social Crimonol 6: 192. doi: 10.35248/2375-4435.18.6.192

between individuals and the social norms around them. He identified and categorised four bonds - *Attachment, Involvement, Commitment, and Belief*. The strength of these four social bonds upon individuals therefore determined the likelihood they were to perpetrate a criminal act. Hirschi argued that adolescents who are attached to their parents, teachers, institutions, and peers; committed to social conventions; involved in terms of time and effort in conventional activities; and believe in the moral values of society and conform to these beliefs, are less likely to participate in criminal behaviour.

It is important to recognize that this paper is not an unqualified or unproblematic application of SCT to CCT programmes nor does the author stringently adhere to the control theorist's assumption that integration of alternative theories is impossible. The application of SCT theory here is intended to demonstrate that it can be applied to CCT programmes and is the criminological theory which appears best suited for this. This paper does not suggest that social bonds are the only theoretical approach that may be applied to a cross-analysis of CCT policies (although their classification does provide a helpful 'match' with the conditionalities in the programmes), but of course alternatives can and should be explored. However, neither does this suggest that CCT programmes should become entwined in confused theory integration; Control theory entailed many diverse phenomena, and CCT programmes, if they can be shown to decrease crime, could prove to be theoretically and empirically valuable and should not be lost in overly complex integrated theory like that of Tittle [12]. Nonetheless it is very much the case that alternative lenses should be applied CCT programmes. But this paper is interested in SCT largely because the evidence garnered from CCTs to date suggests that social bonds are being strengthened by the programmes.

A critical issue of SCT is its resistance to any kind of compromise on assimilation between theories. Social control theorists argue that crime is naturally occurring, others, such as social learning theorists assume that crime is learned. This fundamental difference means the two cannot coexist. A problem which has arisen repeatedly for control theorists is that of the delinquent-peer effect; even Reckless (1967), who is generally associated with control theory, suggested that 'companionship is unquestionably the most telling force in male delinquency and crime.' (p: 10), a suggestion which leans more towards social learning theory than social control and away from the fundamental belief that delinquency is natural. Glueck and Glueck's [13] counter-hypothesis was that 'birds of a feather flock together' so weak bonds move delinquents to associate together. The limits to this argument became readily apparent and the correlations between peers and delinquency were so significant that the answers suggested by control theorists could not account for it. Control theorists continue to underestimate the etiological significance of interpersonal diversity in criminal impulses; possibly due to the fear of violating the assumptions of control theory [14].

Despite these issues, the application of social control theory to CCT not only serves to provide an explanation as how the programmes can alleviate crime but also gives social control theorists an opportunity to demonstrate the practical utility of their theory. Hirschi [10] has been criticised for a failure to address how external stimuli might cement strong social bonds; as a result, control theorists have refrained from presenting any specific guidance about crime control policies [14]. Schreck and Hirschi [15] argued that stakes in conformity cannot be imposed from without which implies that positive crime control via the theory is impossible. Rebellon and Anskat [14] have suggested that it is the role of a new generation of social control theorists to provide guidance beyond consistent monitoring. Can CCT programmes therefore unintentionally provide a crime control strategy for social control theorists? If the implementation of a CCT programme can be shown to strengthen bonds, they may have a crime control strategy which demonstrates that conformity can be imposed via external policies. If this is the case, the findings of whether CCT programmes do or do not control crime could be critical to the theory's fundamental assumptions and the ability of CCT programmes to strengthen these bonds therefore offers the mechanism through which they could potentially reduce crime.

Attachment

The first of Hirschi's social bonds is attachment, the bond which is concerned with ties individuals have with family, school, teachers, peers, and society. The attachment to parents is rooted in the amount of time children spend with their parents and the level of interaction. Hirschi's theory proposed that when individuals have a support system within the family, this ties them to society, ultimately increasing conformity and decreasing crime. As parents exert the greatest influence on a child [16], their impact in developing the role of a child in society is significant. When the family attachment bond is weak, children may seek conformity elsewhere, vulnerable to recruitment into gang-related activities where they find their 'fit' in society. Findings across the literature continue to stress that familial relations are of great significance in determining delinquency [17].

The first channel through which CCTs work to improve parental attachment is by alleviating the difficult circumstances with which people in low socio-economic situations have to contend. Agnew [18] argues that it is almost impossible for poor parents to manage economic demands upon the family whilst also providing quality supervision and social cohesion for children. Sampson and Wilson [19] concluded in similar findings that parents from low-income households face an almost impossible task in rearing well-adjusted children. Conditional Cash Transfers have been praised for their 'income effect' as exogenous and temporary income shocks are relaxed and budgetary restraints faced by many families are lessened. Camacho et al. [3] suggest that the income effect results in satisfaction of economic needs therefore decreasing the necessity to commit crime to provide subsistence. The Inter-American Development Bank (2013) agree, they also highlight that household consumption needs satisfied by CCTs allow parents to spend more time with children, increasing supervision and decreasing free time which children may use to commit crimes. Parental involvement has a myriad of impacts upon children's welfare, from educational success to decreasing delinquency [20]. In the context of CCTs, Heller et al. [21] reinforced the argument that an increase in income gave parents more time for supervising children, which resulted in less exposure to crime and fewer opportunities for children to engage in it. Cash transfers can ameliorate the socio-economic pressure and reduce the need for negative coping strategies. For example Barrientos et al. [22] found that CCTs allowed mothers in Mexico and Colombia to reduce their hours of paid work outside the household which provided the opportunity for more quality time with their children, and reduced periods of unsupervised children at home. This parental involvement can also provide a supervisory function as parents who are more involved in their children's lives are also more aware of their behaviour [17]. *Prospera* in Mexico directly led to positive outcomes for women in the household, reinforcing child rearing responsibilities and building family social cohesion [23]. This strengthening of familial attachment and cohesion is important as studies have shown that limited family support is associated with high levels of violence [24]. Supervision therefore emerges as of great significance in how family attachment determines delinquent proclivity in the household.

Attachment to positive social influences is not limited to the family with polity representing another non-economic institution with which attachment can occur. Additional to family there exists evidence that CCTs can increase the level of attachment to government among beneficiaries, making this attachment another social bond with potential impact on the propensity to commit crime. Hirschi [10] commented that the issue is not solely based on the level of attachment to surroundings, but also on the standards represented by these surroundings; the argument here is that CCTs are a highly visible high quality institution which could strengthen citizen ties to the state. Lance [2] in his analysis of Brazilian and Mexican CCTs demonstrated that the programmes not only strengthen attachment to the state, but also make its institutions appear more legitimate, and hence promote loyalty.

Trust in institutions is determined by their perceived level of performance; therefore building trusts requires sustained high standards of delivery, which allows governments to pursue their long-term policies [25]. As Mejia and Camacho [3] highlight, the assumption that CCTs build trust is based on a number of factors; regular interactions with institutions; participation with institutions; and social networks established with other beneficiaries within institutions, all play a part in building trust. The only empirical evidence is from the Jones et al [26] research on Peru's *Juntos* Programme, which indicated that CCTs do have unintended positive consequences on levels of trust in institutions with which households engage as a condition of the programme.

Conditional Cash Transfers move the state from the periphery into a direct relationship with citizens, which therefore enable people to grasp the otherwise abstract notion of the state [27]. For many beneficiaries, CCT programmes are their first inclusion in state services and therefore establish a relationship from which they were previously excluded. These programmes can reinforce notions that state institutions can work for the poorest and most excluded. Thus, from a situation of no state engagement prior to enrolment, they can establish citizen-state relations and therefore increase attachment to the government. Crost et al. [9] research on CCTs and insurgency led them to postulate that CCTs diminish popular support for insurgents due to the government 'winning hearts and minds' (p: 19), with beneficiaries more likely to cooperate with the government to reduce influence of criminal organisations. Effects of CCTs on support for government appear to show positive feelings as a result of inclusion; Jones et al. [26] found beneficiaries of the *Juntos* programme reported gratitude to the government, whilst Adato et al. [28] reported the same for the *Prospera* programme.

Whilst family bonds have usually been the most powerful factor in delinquency, this is often followed by the influence of 'best friends'. The extent to which the literature has examined CCT influence on peer attachment is still limited yet a number of studies suggest a positive impact due to the increased access to social networks. This stems from the idea that the values represented by educational institutions differ greatly from those of the streets [29]; thus the greatest impact education has upon crime is through social networks formed in school replacing those of the streets. Minnis et al. [30] looked at students who were enrolled in CCT and compared them to students who were non-beneficiaries; their findings were that those enrolled had fewer incarcerated and gang-affiliated friends than their contemporaries. Research has also found that these social networks in schools have themselves been facilitated by the programme, for example cash transfers enabling purchase of uniforms, with appearance of enrolled children influencing how their peers treat them [31]. This perception that cash transfers have made beneficiaries equal to their peers and more difficult to pinpoint as poor was also addressed by Skovdal et al. [32]. This is important as peer groups may have previously excluded poorer children based on perception of their status and appearance, potentially leading to drop out or negative attachments.

Commitment

Hirschi's social bond of 'commitment' involves an individual's stake in conventional behaviour. If the individual invests more in a conventional activity, education, career, or family for example, they will refrain from participation in criminal activities due to the risk to these investments. Often referred to as the rational component of social control theory, the opportunity costs amalgamate much of Rational Choice Theory. The bond links to 'attachment' as the values learned from attachment develop the conventional beliefs we commit to; an individual who invests time in conforming to these conventional beliefs, working hard at school or employment, then has a higher 'stake in conformity' and more to lose if they commit acts of deviancy.

Studies of commitment generally indicate a negative relationship with delinquent behaviour in adolescents [33]. Sampson and Laub [34] in a longitudinal study of 1000 students, found that when controlling for background variables, school commitment, along with parental attachment, were the strongest predictors of low levels of delinquency and crime. Looking at the converse, Hirschfield and Gasper [35] in their study of 3580 inner-city Chicago adolescents found that negative commitment or disengagement from school was predictive of general misconduct. Not all literature support commitment, however, Mosher et al. [36] found that school commitment was not associated with trajectories of aggression or behavioural problems; although Cavendish et al. [37] pointed out that their study involved self-reports from participants and interpreting the results requires caution due to under-reporting of delinquency.

Education increases the opportunity costs of illegal behaviour as human capital increases returns from legitimate work [38]. Educated adults commit fewer crimes due to human capital invested in their educational commitment increasing the opportunity cost of participating in crime [39]. Hirschi [10] suggested that commitment caused individuals to invest, and refrain from committing crimes because they wanted to retain their investments and pursue further success. As adolescents commit to school, their perceived trajectory of long term potential changes and this is then factored into any decisions to become involved in crime, thus triggering a rational choice decision.

Conditionality may have become one of the most controversial aspects of social protection programming; but the role of CCTs in encouraging commitment must be seen as beneficial. To highlight the potential of this, De Brauw and Hoddinott's [40] study of the *Oportunidades* programme examined an administrative mistake in which some beneficiaries did not receive the school attendance form, and as a result were receiving effectively an unconditional cash transfer. They found, perhaps not surprisingly, that those who received payments conditional on school attendance resulted in a higher attendance rate than the unconditional transfers. This evidence indicates that CCTs encourage commitment to school through the requirement to attend, which may not occur without the conditionality of the programme. But this is theoretical and the requirement to attend school does not confirm the commitment of a student to their school, however, Yildirim et al. [41] in their qualitative study of teacher assessments of CCTs noted that some teachers reported that beneficiary children were more hardworking compared to their own pre-transfer studies.

As well as improved attendance, the teachers reported CCT enrolled students were more active and showed increased participation in the classroom. A plethora of research indicates that participation in education increases opportunity costs for students and results in a decrease in crime [38,42-44]. Although it may be true that commitment to education is not the only consideration influencing adolescent behaviour, Corona-Juárez [45] makes a strong case for its importance in crime prevention. Looking at education and unemployment, low education among men was associated with high crime rates and this was amplified by unemployment and youth bulges. Unemployed adolescents with high education did not show the same results, suggesting unemployment was not as important a factor as education; the research concluded that completing secondary education may be the strongest barrier to recruitment to criminal organisations. Adolescents in CCT programmes become enrolled in the educational system which in turn encourages a level of commitment to studies; this commitment increases their opportunity costs as they begin to invest in their education, and ultimately decreases the perceived desirability of participating in criminal activity.

The impact of CCTs upon adult workforce participation has long been debated; perhaps eligibility status manipulation predisposes adults to refrain from formal employment to ensure cash transfers are still received. But most research has shown that this is not the case, with either no effect or small effects found on labour [46,47] suggest that this is due to beneficiaries viewing the transfers as temporary rather than permanent entitlements, treating transfers as a windfall and as thus not changing employment behaviour. This perception of transfers may also influence the behaviour of beneficiary children; if the children believe transfers are not an entitlement, they may commit more to school under the impression that transfers are conditional on school results. One could suggest that CCTs create disincentives to work due to the income boost from the cash transfers; but, as indicated, findings suggest modest or null effects on adult labour participation [48]. De Brauw et al. [40] found that the *Bolsa Familia* programme does not cause a disincentive to work but instead a significant shift from formal to informal employment. This provides evidence that whilst CCTs may alter the working pattern of beneficiaries, the desire to continue to work whether formal or informal indicates a continued commitment to income generation. Finding males increased their paid employment at the expense of domestic labour, whereas females increased their domestic labour at the expense of leisure time showing that CCTs enable beneficiaries to pursue work-related activities [49]. Loureiro [5] in his study of *Bolsa Familia* reinforced the argument that transfer raised the opportunity costs of crime for recipients which in turn influenced their decision-making. In short beneficiaries display a commitment to the actual transfer; the income is a boost for the household and participating in crime represents a way in which transfers may be lost. Loureiro [5] theorised in much the same way that crime put benefits at risk. The fear of losing payments is noted in a number of studies for CCTs [47,50]. The qualitative study that beneficiaries in a CCT valued their transfer more than those receiving an UCT; which means if CCT beneficiaries place greater value on their transfer, then they may indeed perceive it as a more significant opportunity cost when considering criminal activities.

Involvement

Hirschi's [10] third social bond 'Involvement' draws from the previous bonds, in that the key element is that an individual who commits to conventional activities demonstrates higher involvement which allows less time to engage in deviant acts. A simplistic understanding would be the popular idiom '*the devil makes work for idle hands*' as an individual committed to a conventional activity, becomes increasingly more involved with conventional rather than deviant activities, in part because of being 'tied to appointments, deadlines, working hours, and the like, so the opportunity to commit deviant acts rarely arises' [10]. When individuals are not involved in conventional activities they have more available time to consider and participate in criminal acts [16]. Hirschi used the example of school for much of his empirical research, suggesting that involvement in school activities such as homework and meeting deadlines reduced time spent in illegal activities. If greater time spent in education reduces time available for criminal activity, this can also be considered within the CCT context as it requires compulsory education for adolescents.

Involvement is possibly the least investigated social bond yet education and its compulsory aspects may have long-term effects on criminal participation due to the fact that adolescents in school are being kept off the street for long periods. This mechanism, often coined the 'incapacitation effect' [51] suggests that increasing school attendance and involvement should lead to a decrease in the incidence of crime. Moretti and Lochner [38] showed that a 1% increase in the high school completion rate of men aged 20-60 would save the US an estimated $1.4 billion per year in reduced costs from criminal activity. A number of studies have highlighted co-related effects of involvement and delinquency [16,52]. But the mechanism which best explains the effect of involvement and which has been empirically studied most is incapacitation.

The incapacitation effect was first documented by Tauchen et al. [53] who found time spent in school (or work) during a year negatively correlated to the probability of criminal charges within that year. Åslund et al. [54] examined the impact of school involvement on crime by utilizing data variation due to teacher in-service days and they found that incapacitation through school involvement was significantly negatively correlated with property crime; although violent crime appeared to increase. Echoing these findings Luallen [52] used variations in school attendance by examining teaching strikes, and presents similar results suggesting a decrease in property crime but increase in violent crime. The two studies found that keeping children involved in school resulted in an incapacitation effect on property crime but a concentration effect underlying violent crime findings. Whereas the involvement bond prevented children being on the street to partake in property crime, the influx of children in schools increases the number of interactions that facilitate delinquency, especially physical altercations [55]. However, discounts the significance of concentration effects demonstrated, suggesting that school is an important socialising environment for adolescents; whereas some students may use violence to handle social interactions, schools remain a place where they also learn how not to exhibit these behaviours.

Certainly the focus on incapacitation and its impact on crime have garnered increasing interest, and a contemporary flow of quasi-experimental empirical evidence supports the notion of involvement decreasing crime through incapacitation [51,54]. All the papers supported the notion that involvement in school does not leave adolescents enough time to participate in criminal behaviour. The application of compulsory education strategy or increasing minimum dropout age (MDA) appears to strengthen involvement and decrease crime rates. Anderson [55] analysed dropout ages in the US utilising states' variations in MDA and in line with the incapacitation effect showed that keeping youth in school for longer lowered arrest rates. Anderson's results demonstrated that moving the MDA to the age of 18

decreased arrest rates among 16 and 17 year-olds by approximately 9.7% and 11.5%, respectively, against the mean rates of similar aged youths in states with a MDA of 16. His results held for both property and violent crime and again highlighted the role of incapacitation as a mechanism which relates attendance in school as a determinant of crime. The study also presents the theoretical grounding which places involvement in school within the context of CCT programmes. If increased MDA can result in crime reduction, then compulsory education which is part of CCT programmes, and the way the programmes aim to facilitate completion of secondary school, provides the same mechanism for incapacitation.

A number of papers have dismissed the significance of involvement in determining delinquency, suggesting it is limited to school hours, and that delinquent participation is still likely out of school hours or during school breaks [56]. Counteracting this argument, Aslund et al. [54] classified observed delinquent behaviour into weekday and weekends, and also added information for summer break crimes. They found that the only significant variation was for weekend crimes, and whilst the authors point out that the precision of these estimates should be viewed with caution, they do appear to suggest the incapacitation effect may exercise a spill-over influence when adolescents are not physically at school. This is interesting when assessing how CCTs can decrease violent crime, especially if we follow Sabates et al. [57] suggestion that reduction in crime due to compulsory participation in education may be larger than the literature estimates.

Many studies have demonstrated that CCTs induce enrolled children to increase school attendance, and reduce dropout rates [58], so do CCT programmes facilitate Involvement through their enforcement of school attendance? Chioda et al. [8] dismissed the incapacitation mechanism as they estimated the effects of CCT on crime were similar across school and non-school days. Whilst they did suggest CCTs reduce robberies, violent, and drug-related crime, they argued that the incapacitation effect was not a driving force, rather changes to peer groups and reorganized family routines were more important channels. Camacho et al. [3] in their analysis of the impact of Colombia's *Familias en Accion* programme on crime echoed their findings. They also found no evidence of the incapacitation effect based on their hypothesis that violence would be expected to rise during school holidays. But it may be an error to dismiss the incapacitation effect too readily and replace it entirely by the assumption that an adolescent heavily engaged in school would transfer that positive involvement to behaviour outside school hours. This seems a rather simplistic analysis of involvement, as incapacitation may also continue to have an effect beyond school working hours. To emphasise this, both time spent in school and doing homework reduced time available for leisure activities.

Belief

The last of Hirschi's social bonds is 'Beliefs' which refers to a collective of people within a social setting sharing common moral ideals, values, respect for rights, and a societal legal code. The more bound by these beliefs an individual feels, and the more cohesive to their society, the less likely they are commit crime or violate said beliefs [10]. Hirschi's belief bond has ties close to social capital, the perception of the importance of conventional values, morality, and correctness of legal standards, community actions, and support [59]. The context within which this paper links social capital and Hirschi's social control theory is not without precedence, criminologists have long drawn a link between social capital and social bonds [60]. Laub and Sampson [61] argued that integration in society, built around social institutions such as family, school, or work, provides individuals a means to live with critical status, redefining the Hirschi's social bonds in terms of social capital.

The Belief bond, and its theoretical parallel with social capital theory, is another mechanism through which Hirschi's theory can deter criminal behaviour. Communities have the ability to enmesh their citizens in mutual bonds of trust, empathy, assistance, and obligation, which in turn results in lower rates of crime [62]. Seligson et al. [63] found that when individuals are bonded with their community, they are more likely to behave according to society's norms, and therefore less likely to participate in criminal actions. The World Bank has also recognized the importance of social capital as an interventional policy, building social capital by strengthening civil society and social cohesion as an effective bottom-up policy approach for reducing violence [24]. But the belief bond is limited in terms of references in the literature which is why this paper utilises its close contextual similarities to social capital theory of which there is an abundance of scholarly research.

The literature provides significant support for social capital's ability to diminish crime, Kennedy et al. [64] presented that social capital does indeed lower violent crime rates, and has empirical studies to support this from other scholars [42]. Vial et al. [65] for example also found that neighbourhoods reporting higher social capital also reported lower violent crimes. Lederman et al. [66] echoed the sentiments of these scholars but did add an important caveat; they found social capital does have crime-reducing benefits when the relationships that form social capital involve all society members. They found that when social capital is confined to certain groups, i.e., gangs, that also has the potential to induce crime and violence. This finding again has similarities to social bond theory, as Hirschi suggested that social bonds can also appear within deviant groups which would therefore increase violence; highlighting the compatibility of the two theories.

With the accelerated expansion of CCT, programmes have become highly visible to the country and the households they aim to serve. This widespread coverage produces a real perception of government action towards the enrolled households, and when one considers the design features of the programmes which require favour from political elites, it creates a cycle of social altruism [5]. This altruistic attachment to convention then feeds into the theory of opportunity costs of committing a crime; these 'moral' opportunity costs [67] decrease the likelihood of criminal behaviour being favoured over conventional when making a rational choice. Romero and Mendoza [68] showed that strong social cohesion in communities can prevent the penetration of organised crime through a reduction in corruption, creating strong communication channels which alert neighbours regarding criminal behaviour, and increasing overall trust within a community. The Belief bond appears to be linked simultaneously to crime reduction and to be subject to strengthening by CCT programmes. This is particularly true when considering the bond as social capital, and where it demonstrates the final channel through which Hirschi's theory can be utilised in explaining how CCT programmes diminish crime.

Conclusion

This paper has aimed to highlight a gap in the literature which has so far failed to demonstrate how Conditional Cash Transfer programmes can influence participation in crime. As with many studies which examine welfare or poverty reduction techniques and crime, whilst a relationship often appears apparent, the mechanisms through which these programmes can facilitate a decrease in crime are often obscure. To remedy this gap in the research, this paper utilised Travis Hirschi's

Social Control Theory [10] as a channel for understanding how CCTs may have a role in crime reduction. The author believes the social bonds central to Hirschi's theory can be strengthened by CCTs and thus act to diminish crime.

Violent crime and its spill-over into social welfare have become major challenges in the policy agendas of Latin America [42] demonstrating how certain policies could alleviate these regional problems could become of vital importance. An advantage of programmes such as CCTs is that they are often already implemented therefore costs and issues related to implementing a programme specifically to tackle crime are not an issue. Interestingly, the relationship between such programmes and violent crime is not limited to scholarly interest. The Mexican CCT programme *Prospera* demonstrates potential for crime mitigation yet fails to recognize how this objective would be realised.

The paper analysed each of Hirschi's social bonds; attachment, commitment, involvement, and belief, reviewing the literature which accompanied each bond. Albeit for some bonds, the evidence was scarce, which simply served to highlight gaps in the research, but the overall picture garnered enough support to suggest that within the theoretical framework of SCT, CCTs do appear to show evidence of criminal deterrence, or at least potential to strengthen social bonds. Nevertheless, SCT is often presented as complete parsimonious theory without a necessity to be combined or expanded with other theories; even if the central argument of the theory is accepted, it seems unnecessary to assume that normative encouragement is never an influence on crime. The purpose of this study was not to suggest that SCT was the only applicable theoretical approach for assessing the potential of CCT programmes to diminish crime, and the author is aware that other explanations could also be playing a part, yet there is evidence that all the social bonds in the SCT are being strengthened by CCT programmes.

Furthermore, there certainly could be other factors which encourage crime control in CCT programmes, one example being negative inducement, the fear that the individual will be withdrawn from the programme if they participate in criminal behaviours, which should be researched further. This should be a consideration as it has been shown that some beneficiaries see cash transfers as temporary and not fixed entitlements [47] so may indeed be altering their behaviour accordingly. We should take care in making the assumption that the cash benefit has significant bearing on recipient decision making related to household income however. The debate as to whether cash transfers have a detrimental impact on labour participation continues to surface despite the majority of research providing robust findings that this is not the case [46]. Gonzalo-Florez et al. [69] also found that the increase in wages for workers enrolled in the programme appears to reduce the number of dropouts for behavioural reasons; this should theoretically increase the opportunity costs of meeting the programme requirements and lead to more dropouts, the fact that it doesn't may be evidence that the cash transfer is important but does not always influence beneficiaries in the expected way. Interestingly enough another paper by Ribas and Soares [70] both strengthens the notion that negative inducement is not occurring but also identifies a possible avenue through which CCT programmes might increase crime. They found that CCT programmes promoted a transition of employment from the formal sector to the informal. Their conclusion was this was due to workers realising informal labour was untraceable by the government and therefore they were still officially eligible to receive the cash transfer. Further research should also explore this potential avenue for beneficiaries to seek further untraceable income as it may move some beneficiaries to economic crimes to boost household income.

This paper is not suggesting that any of the reviewed components, whether it be SCT or CCTs, can offer a complete solution to criminal activity. Neither does it present any specific postulations regarding causes related to socioeconomic background. Rather the study has sought to focus on the potential of CCT programmes to alleviate violent crime, whether as indirect impacts or by being encompassed into a state's overall violence reduction policy. Social control theory provides one theoretical construct with which the programmes could warrant further research and analysis. This paper has demonstrated a theoretical framework involving crime, criminological theory, and CCT programmes, and drawn together the literature to give credence to the theory that CCTs can indeed decrease violent crime.

This research received no specific grant from any funding agency in the public, commercial, or not-for-profit sectors.

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