Motivation for change among drug users and justice: a literature review

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Abstract: The Transtheoretical Model is an important theory in the study, evaluation, and intervention regarding motivation for changing behavior related to psychoactive substances, including individuals entangled in the justice system. The objective was to systematically review the literature addressing populations involved with the legal system and studies that are deeply related to the Transtheoretical Model. We have researched the following databases: Medline, SciELO, PePSIC and Web of Science, for papers published in the last 16 years. Seventeen papers were identified, indicating this is a field seldom studied, though the papers presented promising results. This practice is used worldwide as a re-socialization factor. Studies have emerged in Brazil addressing juvenile offenders, assessing motivation and motivational interventions. Further research is needed, while the legal system needs to invest more in treatment and subsequent motivation for treatment.

Keywords: Transtheoretical model; justice; change stages; psychoactive substances; treatment.

MOTIVAÇÃO PARA MUDANÇA EM USUÁRIOS DE DROGAS E JUSTIÇA: REVISÃO DE LITERATURA

Resumo: O Modelo Transteórico é uma importante teoria no estudo, avaliação e intervenção na motivação para mudança de comportamento relacionado às substâncias psicoativas inclusive entre pessoas envolvidas com a Justiça. Objetivou-se fazer uma revisão sistemática de literatura de estudos com a população envolvida judicialmente e que estejam profundamente relacionadas com o Modelo Transteórico. Foi realizada uma busca nas bases de dados Medline, SciELO, Pepsic e Web of Science das publicações nos últimos 16 anos. Da literatura encontrada – 17 artigos, pode-se perceber que ainda é um campo pouco estudado, mas com resultados promissores. No mundo todo, essa prática é utilizada como um fator para a ressocialização. O Brasil tem despontado com estudos com adolescentes infratores, avaliando a motivação e intervenção motivacional. Sugerem-se que sejam feitas mais pesquisas e que a justiça passe a investir mais no tratamento e subsequente motivação para tratamento.

Palavras-chave: Modelo transteórico; justiça; estágios de mudança; substâncias psicoativas; tratamento.
MOTIVACIÓN PARA EL CAMBIO EN LOS USUARIOS DE DROGA Y LA JUSTICIA: REVISIÓN DE LA LITERATURA

Resumen: El Modelo Transteorico es una importante teoría en el estudio, evaluación e intervención en la motivación para el cambio de comportamiento relacionado a las sustancias psicoactivas incluso entre personas involucradas con la justicia. Se ha intentado hacer una revisión sistemática de literatura de estudios con la población involucrada judicialmente y que están profundamente relacionadas con el Modelo Transteorico. Se realizó una búsqueda en las bases de datos Medline, SciELO, Pepsic y Web of Science de las publicaciones en los últimos 16 años. De la literatura encontrada – 17 artículos -, se puede percibir que todavía es un campo poco estudiado, pero con resultados prometedores. En todo el mundo esta práctica se utiliza como un factor para la resocialización. Brasil ha surgido con estudios con adolescentes infractores, evaluando la motivación e intervención motivacional. Se sugiere que se realicen más investigaciones y que la justicia pase a invertir más en el tratamiento y posterior motivación para el tratamiento.

Palabras clave: Modelo transteorico; justicia; estado de cambios; las sustancias psicoactivas; tratamiento.

Introduction

We should explore the field of study of chemical dependency since it has complex and dynamic aspects and may intervene with various models. One of the theories encompassing the problem of dependency is the Transtheoretical Model of Change created by James Prochaska and Carlo DiClemente in the 1970s. The model emerged from a systematic integration of more than 300 Psychotherapy theories together with the analysis of the main behavioral theories (Prochaska & Velicer, 1997). This model assumes that a long-lasting change of dysfunctional behavior takes place through a series of stages experienced over the course of change, namely: Pre-Contemplation, Contemplation, Preparation, Action, and Maintenance (Norcross, Krebs, & Prochaska, 2011).

“Pre-Contemplation” is a stage in which the person does not realize s/he has a problematic behavior and for this reason does not consider the possibility of changing it. The “Contemplation” stage is that in which the individual considers the possibility of change and assesses options to implement it. There is, however, ambivalence between changing and maintaining the status quo, which hinders concrete actions toward change (Szupszynski & Oliveira, 2008a). Readiness is one of the characteristics of the “Preparation” stage, that is when one is ready to change and to commit himself to make it occur. There is greater responsibility in this stage, though; this construct is the object of criticism due to the difficulty in empirically investigating one’s desire to change. “Action” is the fourth stage in which the individual creates external conditions to enable change (Prochaska, Norcross, & DiClemente, 2013). “Maintenance” is the following stage, in which changes are integrated into a new lifestyle and gains are obtained. The correct identification of the stage of change in which individuals may lessen resistance, often characterized by difficulty accepting, adhering to and carrying out coping strategies during treatment and when preventing relapses. Lapses and relapses are natural factors in the process of change.
Motivation is characterized as a dynamic process. Hence, individuals may present different characteristics, as motivation may be influenced by both external and internal factors. Readiness to change is key to the work using TMC and the Motivational Interview.

The Motivational Interview is a therapeutic approach that helps people recognize and act upon current or potential problems and is based on the TMC developed by Prochaska and Di Clemente. The Motivational Interview is applied to various health behaviors and its strategy to change behavior is more persuasive than coercive (Miller & Rollnick, 2000). In this sense, readiness to change is related to being aware of the problem and having self-knowledge of one’s ability to change. Treatment readiness, in turn, is related to the resources individuals have available to treat themselves (seeking experts, clinics etc.). Conceptually, a person may seek treatment and initiate it (treatment readiness) but not be ready to make a radical change (low readiness to change) (Szupszynski & Oliveira, 2008a).

In regard to the assessment of motivational stages, various studies have used instruments to assess the motivational aspect of behavioral change, the most frequently used of which are the University of Rhode Island Change Assessment Questionnaire (URICA) (McCounaughy, Prochaska, & Velicer, 1983), which includes four subscales: pre-contemplation, contemplation, preparation, action and maintenance; and the Stages of Change Readiness and Treatment Eagerness Scale (SOCRATES) with three subscales: recognition, ambivalence and action, which was created by Miller and Tonigan (1996). Both scales were translated into Portuguese and were assessed for validity and reliability (Figlie, Dunn, & Laranjeira, 2004; Szupszynski & Oliveira, 2008b).

In terms of treatment, Longshore, Prendergast, & Farabee (2004) note that coercive treatment for chemical dependents is justified by the high correlation between drugs and crime so that a decrease in the consumption of drugs would be followed by a decrease in criminal activity. There is a possibility that drug offenders who are users benefit from treatment even if they initiate treatment involuntarily and do not acknowledge they have a problem with drugs (Longshore, Prendergast, & Farabee, 2004).

Assessments of the effectiveness of treatments that involved some type of legal pressure were described by Farabee, Prendergast, & Anglin (1998): 11 studies reported positive results regarding drug consumption, five of which reported decreased use after intervention; four studies did not identify differences in consumption; and two studies reported negative results with increased consumption. This assessment, however, did not relate motivational factors with the efficacy reported by the studies.

Various studies addressing drugs and criminality explain there are three factors related to criminality and the use of psychoactive substances (PAS): drug trafficking, sociocultural variables, and the effect of the psychoactive substance on behavior (Hoaken & Stewart, 2003; Oliveira, 2010). Another study addressing convicted individuals reports strong correlations among drug use, criminal recidivism and types
of crime (robberies) with violence, in which the substance most frequently used were alcohol (Tavares, Scheffer, & Almeida, 2012).

Among the prison population, El-Bassel et al. (1998) assessed the psychometric quality of the URICA and motivation stages in a female population. Based on the inclusion protocol, which established some psychopathologies, the sample was divided into five groups: 1) denial; 2) not involved; 3) ambivalent; 4) decision-making; 5) participation. The results show that the “denial” group scored above the mean on the Pre-Contemplation subscale, while the “ambivalent” group scored above the mean on all the subscales.

In the United States, treatment programs within the sphere of criminal justice commonly use coercive strategies among offender PAS abusers to make them begin and adhere to treatment, with this factor – coercion – influencing treatment motivation. A significant percentage of the population receiving government-funded pharmacological treatment is composed of people who received treatment through the criminal justice system (Prendergast, Greenwell, Farabee, & Hser, 2009). One study conducted by the National Institute on Drug Abuse (NIDA) in the United States reports that compulsory treatment is as effective as voluntary treatment. Individuals who were referred to treatment compulsorily were less motivated at the beginning of the treatment; however, over the course of treatment, they reflected upon themselves and acknowledged their need for change (Kelly, Finney, & Moos, 2005). Another study reviewed the results of 50 studies using both experimental and quasi-experimental models among prisoners with drug problems and reported that the individuals who undergo treatment are less likely to relapse, compared to those who received no intervention for drugs (Wilson, Mitchell, & MacKenzie, 2006).

Brazil has the fourth largest prison population in the world and currently faces a system-wide crisis. According to the Oitavo Anuário Brasileiro de Segurança Pública [8th Brazilian Yearbook of Public Security], the prison population increased from 90,000 to 622,000 in 24 years (Fórum Brasileiro de Segurança Pública, 2014). In this population, 25.5% are serving time for drug trafficking, the primary cause of imprisonment in the country. Evidently, this figure does not consider more than 20,000 adolescents in custody receiving socio-educational measures; in 2012, 27% of them became involved with trafficking.

Fortunately, an important step has been taken toward a better approach to address the problem with the implementation of Therapeutic Justice (TJ). TJ is intended to lessen social harm, while offender drug users’ health is assessed to receive treatment as an alternative measure (Silva, Queiroz, Queiroz, & Barbosa, 2009).

Since this is an innovative policy in Brazil, studies are needed to identify the best motivation for drug users who would benefit from this public policy in terms of treatment adherence. Therefore, this study’s objective was to perform a systematic literature review of scientific papers and books addressing interventions and assessments using the TMC among drug users receiving treatment for legal reasons.
Method

The following databases were used in this literature review: Medline, SciELO, Scopus and Web of Science, along with the descriptors: Stages of Change AND prisoners, Stage of change AND offenders, Readiness to Change AND prisoners OR offenders, Stage of change AND adolescents. Figure 1 shows how this search took place in this study.

The procedures include the selection and inclusion of papers. To be included, a paper should assess motivation or involve methods related to the Transtheoretical Model or address users of psychoactive substances involved in judicial processes. Papers assessing only motivation for changing criminal behavior or that did not address the Transtheoretical Model or stages of change were excluded.

After searching the databases, all the titles were read. The abstracts of studies, the titles of which indicated eligibility, were also read to identify whether deeper analysis was needed. Papers that did not meet the inclusion criteria were eliminated, while the full texts of those that met the criteria were fully read. After this process, the papers were reanalyzed to verify whether they were within the theme of interest, so that only papers that were fully related to the TMC, drug use and justice, were included. This search was conducted on March 2016.

Overall, 529 papers were initially found according to the descriptors; 35 papers were selected after the search was refined. After analysis, duplicate copies of papers were excluded; four papers published in Brazilian journals and 12 papers published in international periodicals remained for a total of 16 papers. The themes identified in the papers were separated and divided into two axes: a) studies addressing adolescents and b) studies addressing adults.

Figure 1. Flowchart of the searched and selected papers.
Results

A small number of papers addressing the theme was found in the search conducted in the aforementioned databases. The search shows that most studies were conducted in various countries on different continents. The subdivision of axes facilitated the classification of studies. Table 1 presents a synthesis of the studies:

Table 1. Objective of approach or technique used in the selected papers.

<table>
<thead>
<tr>
<th>Studies</th>
<th>Design</th>
</tr>
</thead>
<tbody>
<tr>
<td>Becan et al.</td>
<td>Assessed the efficacy of the TRIP (Treatment Readiness and Induction Program) intervention, intended to improve motivation for treatment adherence among adolescent drug users (n = 519).</td>
</tr>
<tr>
<td>Yong et al.</td>
<td>Assessed how the process of change takes place between motivational stages among offenders who received a brief motivational program (Short Motivational Program – SMP) (n = 371).</td>
</tr>
<tr>
<td>D’Sylva et al.</td>
<td>Assessed the stage of change and readiness to change among prisoners who had already undergone a treatment program for the use of alcohol (n = 237).</td>
</tr>
<tr>
<td>Anstiss et al.</td>
<td>Investigated change of delinquent behavior among prisoners serving time for various crimes.</td>
</tr>
<tr>
<td>Clair et al.</td>
<td>Analyzed degree of motivation among imprisoned adolescent offenders and the effect of a motivational intervention (n = 114).</td>
</tr>
<tr>
<td>Farbing et al.</td>
<td>Presented the application of the BSF protocol (Beteende – Samtal – Förändring) focused on substance use and criminal behavior.</td>
</tr>
<tr>
<td>Zambom et al.</td>
<td>Qualitative, longitudinal study addressing adolescents who received a motivational intervention (n = 102).</td>
</tr>
<tr>
<td>Polaschek et al.</td>
<td>The study assessed motivation to change delinquent behavior among prisoners (n = 260).</td>
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<tr>
<td>Polaschek et al.</td>
<td>Assessed therapeutic alliance in a rehabilitation program in the prison system (n = 50).</td>
</tr>
<tr>
<td>Oliveira et al.</td>
<td>Pre-experimental study with a motivational interview (n = 103).</td>
</tr>
<tr>
<td>Prendergast et al.</td>
<td>Assessed perceived coercion and motivation for treatment among drug users convicted for minor crimes in California (n = 1,289).</td>
</tr>
<tr>
<td>Andretta et al.</td>
<td>Experimental study addressing adolescent offenders to assess changes in motivational stages, consumption and beliefs concerning the use of drugs before and after a Motivational Interview (n = 50).</td>
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</tbody>
</table>

(to be continued)
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<tr>
<th>Studies</th>
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<tbody>
<tr>
<td>Slavet et al. (2004)</td>
<td>Longitudinal study intended to measure motivation to change among imprisoned adolescent users of marijuana (n = 122).</td>
</tr>
<tr>
<td>Cropsey et al. (2003)</td>
<td>Assessed motivation for change after imposition of a quit-smoking program in a prison with smoking prisoners (n = 314).</td>
</tr>
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</table>

Source: The authors.

Discussion

This study’s objective was to review studies addressing motivation, especially considering the Transtheoretical Model, in which treatment was determined by the legal system or took place within a prison system. Note that researchers from various countries have become interested in behavioral change, whether it is addictive behavior or behavior linked to other problems, such as people with legal issues. Numerous studies show that motivation is a predictor of active participation in treatment, presenting promising results both among patients attending treatment, in general, and those referred by the legal system (De Leon, Melnick, & Tims, 2001).

Some of the studies, in which the Brazilian studies are included, report the use of substances by adolescent offenders. Adolescence is an age group at risk because the neurocognitive and social development at this age can be harmed by the use of drugs. The studies also show that the Pre-Contemplation stage is more frequent among this population, which represents a challenge for professionals. Motivational interventions such as the TMC and Motivational Interviews appear as the most frequently used interventions and were used in most of the studies addressing adolescents (Slavet et al., 2006; Andretta & Oliveira, 2008; Hemphill & Howell, 2000). Additionally, new motivational approaches were tested and were verified for efficacy, such as the Treatment Readiness and Induction Program (TRIP), which is intended to increase motivation and prepare adolescents for treatment (Becan et al., 2015).

The Pre-Contemplation stage is characteristic of individuals who do not have a clear notion of the real extent of their problems and, for this reason, are considered to be less motivated. Therefore, a solution needs to be offered related to this basis. For this reason, studies seeking to ground the Motivational Interview and other
techniques to support the promotion of change are important, because the results and conclusions presented by these studies indicate an important path that actions in the field can follow. Promoting awareness is key for changes to occur, helping individuals to advance in stages until they reach the Maintenance stage. Also, note that the motivational work presented by these studies promotes changes in various aspects of life, even helping individuals in decision-making processes, self-awareness, premeditation (thinking before acting), and positive thinking to avoid relapses (Becan et al., 2015).

The studies addressed here present different methods, showing a large diversity of ways stages of change can be assessed, in addition to presenting different results. A highlight is some international studies reporting that coercive actions promoting treatment in this population present positive effects and are actions intended to lessen consequences of drug use in the future and to reduce crime. The studies indicate that acknowledging the problem is key for people to change and could be achieved through motivational approaches. In the meantime, it is worth noting that possibilities of change increase with the use of environmental and social resources (school, work, groups of friends, use of free time, support groups and mutual aid groups) (Calheiros, Andretta, & Oliveira, 2006).

The link between decreased drug use and decreased criminality is one of the main reasons for investing in the treatment of people facing problems in the justice system. It is reasonable to expect a governmental or non-governmental body, in partnership with the legal system, to provide treatment and help lessen offenders’ drug problems, though not necessarily lessening their criminal behavior (Longshore, Prendergast, & Farabee, 2004). Concern with changing behavior of PAS consumption among the prison population is the topic of several studies and has intensified in recent years (Rosen et al., 2004). In the meantime, assessments and interventions directed to motivation and its application in the legal system are of paramount importance.

The programs described in the papers addressed in this review also show that the identification of an individual’s stage of motivation for change enables devising a work plan with objectives and tools specific to the specific stage, respecting individual stages. Likewise, such intervention strategies are continually assessed and generally require a therapeutic alliance be established (Polaschek & Ross, 2010). These studies also open opportunities to understand the efficacy of such treatments for populations such as adolescents (Aveyard, Lancashire, Almond, & Cheng, 2002), using and implementing good models in Brazil.

In the United States, the legal system of each state, together with universities, usually conducts studies on the treatments provided to this population, especially those related to motivation (Garner, Knight, Flynn, Morey, & Simpson, 2007). This partnership has not yet seriously taken place in Brazil because there are no systematized procedures to treat alcohol or drug consumption in Brazilian prisons, such as those
found in the United States. In Brazil, most of these treatments take place outside prisons, while referrals have not been systematized yet.

Some of the studies included here addressed overcoming resistance to treatment, often characteristic of the ambivalence stage. Regarding this conflict, Szupszynski and Oliveira (2008a) explain that drug users may even recognize the harm involved in their behavior, but still remain attracted to the addictive behavior, not having any motivation to initiate or maintain treatment. The studies show that, because of this factor, treatment, even if imposed by the legal system, could be beneficial if motivational issues are addressed with the objective to overcome ambivalence and initiate a change in behavior.

Finally, referral to treatment on the part of the legal system is an initial step to be taken, moving toward a situation in which individuals can take responsibility for their lives and choose to change or pick among options on how to change, as well as reassess their situation in the legal system. Further studies are also essential to verify the efficacy of motivational techniques used with this population, aiming to overcome barriers to treatment adherence and successful interventions.

References


Submission: 3.8.2016
Acceptance: 20.6.2017