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TITLE PAGE

Article title: Planting the seeds of change: Directionality in the narrative construction of recovery from addiction.

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ABSTRACT

Objective: The dominant theoretical perspective that guides treatment evaluations in addiction assumes linearity in the relationship between treatment and outcomes, viewing behaviour change as a 'before and after event'. In this study we aim to examine how the direction of the trajectory of the process from addiction to recovery is constructed in personal narratives of active and recovering users.

Design: 21 life stories from individuals at different stages of recovery and active use were collected and analysed following the principles of narrative analysis.

Results: Personal trajectories were constructed in discontinuous, non-linear and long lasting patterns of repeated, and interchangeable, episodes of relapse and abstinence. Relapse appeared to be described as an integral part of a learning process through which knowledge leading to recovery was gradually obtained.

Conclusion: The findings show that long term recovery is represented as being preceded by periods of discontinuity before change is stabilised. Such periods are presented to be lasting longer than most short-term pre-post intervention designs can capture and suggest the need to rethink how change is defined and measured.

Keywords: addiction / substance use, behaviour change, narratives, recovery, processes of change

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MAIN TEXT

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1. Introduction

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Behavioural change has become one of the most important themes in addiction and is the central aim in the treatment of drug using individuals. Previous research has shown that recovery from addiction can be accomplished both with the assistance of formal interventions (Gossop, Stewart, Treacy, & Marsden, 2002; Jones et al., 2009; McIntosh, Bloor, & Robertson, 2008; Simpson & Sells, 1990) or without them, while a substantial body of literature recognises the possibility of self-change and natural recovery (Blomqvist, 1996, 1999; DiClemente, 2006; Granfield & Cloud, 1996; Klingemann, 1991; Robins, 1973; Sobell, Cunningham, & Sobell, 1996; Sobell, Ellingstad, & Sobell, 2000). Both these pathways - with and without treatment - start from the acknowledgement that change and recovery are attainable outcomes.

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While the concept of change has historically constituted a philosophical problem, epistemological concerns about the definition of change are not customarily discussed within research designs. Research studies tend to refer to change as a fixed notion, while only a very limited amount of those are inclined to provide ontological definitions which might affect the aforementioned designs. The aim of this paper is to examine how the process of change from addiction to recovery is constructed in personal narratives, in order to add to the existing knowledge on recovery processes as well as the epistemological and methodological issues surrounding the concept of change. In order for a comprehensive examination of personal constructions of the process of change, and with the aim to capture the ramifications of this phenomenon, this paper employs a multidisciplinary approach. Drawing on social sciences, such as psychology, criminology and the addiction field allows for a close examination of personal as well as contextual factors that influence addiction and recovery. Borrowing elements from natural sciences enables a broader examination of individuals as dynamic agents and parts of their social systems and contributes towards a holistic theoretical and conceptual apprehension of change.

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The attempt to create a unified approach by utilising the benefits of multidisciplinary integration of knowledge has been admittedly challenging, especially

64 due to differences in terminology when addressing common concepts. Arguing for a
65 unity of knowledge, Wilson (1999: 8) notes that fragmentation of knowledge is an
66 artefact of scholarship and encourages a misinterpretation of the real world, preventing us
67 from seeing the ‘whole picture’. However, literature from general systems theory advises
68 that all systems fragment and differentiate in a process of seeking integration and
69 convergence.

70 **2.Literature review**

71 **2.1. Epistemological and conceptual issues in the measurement of change-a brief** 72 **overview**

73 The concept of change, as well its relation to the notion of time have always
74 prominently featured in philosophical discussions. There is a tremendous variety of
75 philosophical and historical attempts to explain the ontology of time which cannot be covered
76 in this paper. One of the most central debates, however, refers to the metaphysicsⁱ of time and
77 what constitutes reality, as well as the ontology of concepts such as causation, temporal order
78 and change. Practices related to time constitute the basis of human experience (Hammer,
79 2011) and despite the tendency to regard such concepts as having objective definitions,
80 philosophical reflections on their nature and properties vary. Such reflections have set the
81 foundations of several epistemological approaches and, therefore, still influence the way
82 research studies are designed and conducted.

83 For the purposes of this paper and in order to understand the basic conceptual
84 components of change -and the metaphysics thereof- it is worth mentioning one of the central
85 problems for the philosophy of time: the dispute over time and reality as immutable or in
86 motion. A position in this debate affects the conceptual boundaries of change. Aristotle
87 challenged the very existence of time arguing that none of its parts exist (the present has no
88 duration and thus does not exist, the past has passed while the future has not taken place yet).
89 Zeno believed in an a-temporal and motionless reality, while Parmenides argued that change
90 is impossible, as when something changes loses its properties and thus does not exist
91 anymore. An important counter argument originated from Heraclitus who argued for the
92 dynamic aspects of a world in constant motion, change and fluxⁱⁱ, reflected in the metaphor
93 ‘we step and we do not step in the same river, we are and we are not’ (Blackburn, 2008;
94 Campbell, O'Rourke & Silverstein, 2010; Hammer, 2011; Kahn, 2013). An important
95 ontological distinction that has greatly influenced the epistemology of change is the

96 difference between the Aristotelian notion of a fixed concept of things (time is the "number
97 of movement in relation to the before and after" (*Phys. IV 11. 219hlf.* as cited in Chernyakov,
98 2002) against the Heraclitian position of constant change, which was later found in the
99 writings of Hegel whose view of time was consonant with that of a process of 'becoming'
100 (Hammer, 2011). In other words, is change a succession of incidents and states or is it a fixed
101 notion, a sui generis entity that can be marked as a distinct event in time?
102

103 2.2. Measuring change and recovery in addiction 104

105 The notion of change as a discrete, uni-directional event is not a conceptual construct traced
106 back to Newtonian scientific explanations whereby one-way causality, among other
107 epistemological elements, -was the foundations of scientific knowledge (Von Bertalanffy,
108 1969). The same 'if-then' causality is also reflected in the subsequential epistemological
109 perspective of positivism whereby, for example, any change in the outcome is measured on
110 the basis of a pre-existing unchanging variable (Blackburn, 2008). There are a considerable
111 amount of studies which acknowledge change as having a historical reality and recovery as a
112 gradual process. Traditionally, however, there has been a traditional reliance on designs
113 which, in an effort to maintain criteria that have been proven to grant reliability,
114 generalisability and validity surpass theoretical work on the nature or the causal mechanisms
115 (Bringmann, & Eronen, 2016).

116 Whilst there is an abundance of studies which explore the subjectivity in
117 addiction and recovery, there is also a constant need for evidence on interventions that
118 'work', and, consequently, a large area of research conducted in the field of addiction has
119 traditionally focused on treatment effectiveness. Designs such as randomised controlled
120 trials and the use of pre-post measures have been preferred as methods with which
121 change is measured, despite arguments that such approaches are acontextual and do not
122 capture the mechanisms under which treatment is delivered (Pawson & Tiley, 1997). The
123 prevalence with which such methods are used has resulted in deeply rooted perceptions
124 on the nature and concept of change, the most significant of which are the assumptions of
125 change as a linear construct, as well as the expectations of a direct causality between
126 treatment and change.

127 The assumption of a direct causality between treatment and change raises doubts
128 as to whether the questions we are asking are the 'right ones' (Orford, 2008). A recurrent

129 limitation in the evaluation of the effectiveness with the use of pre-post measures is the
130 assumption of short term and unidirectional effects between intervention and outcomes,
131 often viewing change through the lens of 'before and after event' in which effectiveness
132 is judged on the basis of abstinence or relapse. Miller (1996) has referred to this kind of
133 approach as 'simplistic and unqualified', usually leading to very low success rates as it
134 only recognises abstinence and relapse ignoring other favourable outcomes such as
135 reduction in drinking or drug taking. Such notions promote the cultivation of
136 dichotomous perceptions around addictive behaviours as something that an individual
137 either has or has not, and a view of treatment outcomes as either successful or not, with
138 recovery being equivalent to adherence to treatment criteria. Moreover, such
139 conceptualisations depict change as an all-or nothing event, failing to incorporate the
140 underlying personal trajectories and individuals as evolving, progressing and altering
141 through a specific time course. Similar perceptions are prevalent in the way relapse is
142 conceptualised while researchers and clinicians have often been unsuccessful in
143 predicting relapse due to the reliance on a linear and continuous model, although the
144 process involved is more likely to be discontinuous (Witkiewitz & Marlatt, 2007).

145 Research on natural recovery offers evidence that behaviour change might lay in
146 other factors, not necessarily associated with treatment. The first important review
147 (Sobell, Ellingstad & Sobell, 2000), which was based on 38 studies on natural recovery
148 conducted over a 40-year period, challenged two traditional and dominant beliefs: that
149 individuals can recover only through treatment and that the only way to recovery is
150 through abstinence. The reviewed research not only offers an alternative perspective on
151 how behaviour could change but also demonstrates how factors leading to positive
152 behaviour change might be found outside the therapeutic environment. Interventions
153 might be only one amongst the numerous factors contributing to change (DiClemente,
154 Bellino, & Neavins, 1999); the life course of substance abusers is also affected by many
155 interpersonal, intrapersonal and environmental factors (DiClemente, 2006). For example,
156 better health, professional advancements as well as improvements in marital relationships
157 are all factors that appear to contribute to recovery (Edwards et al., 1977).

158 The aim of research focusing on change as a process is not to show that treatment
159 and interventions are ineffective, but to stress the importance of exploring and
160 conceptualising how a person changes, not only whether they do so, as factors that are
161 involved within change processes could facilitate or hinder positive treatment outcomes.
162 Pre-post evaluations and controlled clinical trials are outcome-focused and often provide

163 only limited information on how a specific intervention might work (Pachankis &
164 Goldfried, 2007). Additionally, a concentration on measures taken before and after
165 treatment can lead to a failure to assess mediators (why and how change is occurring) of
166 change, factors that differ in variability during the course of therapy (Laurenceau, Hayes,
167 & Feldman, 2007). The study of processes, on the contrary, could reveal discontinuities
168 and different ranges in treatment responses, highlighting markers of transition which
169 could be isolated and explored further to derive implications for the facilitation of change
170 (Hayes, Laurenceau, Feldman, Strauss, & Cardaciotto, 2007).

171

172 2.3. Interdisciplinary approaches and an integrated conceptualisation of the change 173 processes

174

175 Von Bertalanffy (1969), in the context of general systems theory, notes that one
176 of the scientific problems encountered in many disciplines stems from the explanation,
177 prediction and control of relations between two or a few variables and the effort to
178 explain behaviour in a unidirected manner. In disciplines however that focus on living
179 organisms, psychology in particular, such explanations would be problematic as human
180 beings are not the mere sum of variables but constitute *active personality systems*,
181 existing and interacting with many and partly unknown variables: ‘*A different concept of*
182 *organism and personality is that of system—that is, a dynamic order of parts and*
183 *processes*’ (1969:39).

184 Adding to the notion of organisms as systems, chaos theory focuses on the study
185 of non-linear dynamic systems, examining behaviours that appear to be discontinuous
186 and unpredictable over time (Goerner, 1994). Chaotic systems are described as dynamic
187 and open to constant exchange of information, in interconnection with other systems.
188 Chaotic behaviours were first examined by the meteorologist Edward Lorenz (Gleick,
189 1987); however the study of chaos has found applications in many disciplines, with
190 discontinuity, turbulence and non-linear changes found in many natural and artificial
191 systems, including human behaviour. This parallelism is not merely metaphorical; there
192 are similarities that chaotic systems and human behavioural systems share. Chaotic
193 systems but also human behaviour are ‘open’ systems, existing in interaction with their
194 environment importing energy and information and are reorganised through it, as
195 opposed to ‘closed’, non-chaotic systems which devolve to ‘stasis’ or death. Open

196 systems, when reacting to disturbances, can operate in disequilibrium, exhibit chaotic
197 behaviours but return back to equilibrium through reorganisation, self-renewal and
198 adaptation (Parker, Schaller & Hansmann, 2003). Such behaviours appear in more
199 disciplines. Prigogine & Stengers (1984), for example, in their work in nonlinear
200 chemistry and physics, argue for the way *'order comes out of chaos'* and the role of
201 turbulence and disorder as part of a self-organisation process.

202 In the social sciences and disciplines that focus on human behaviour, similar
203 conceptualisations of change can be found in studies focusing on transition periods and
204 life events, as well as in processes and therapeutic change in the course of various
205 psychological disturbances. For example, the behaviour displayed by open systems and
206 their return to organisation through chaos, resembles the way psychological growth and
207 positive change occur after periods of distress. Tedeschi and Calhoun (2004) argue that
208 positive change can occur as a result of the struggle with highly challenging life crises,
209 the latter typically experienced with distress and unpleasant emotions as individuals try
210 to adapt to new circumstances. However, they note, that 'there is gain in suffering', as
211 negative events and life crises can lead to a positive self-transformation referred to as
212 'post-traumatic growth'. Linley & Joseph (2004) use the similar notion of 'adversarial
213 growth', to refer to change that occurs after struggling with adversity, leading individuals
214 to higher levels of functioning. Similarly, Kelso (1995) argues that when new changes in
215 an individual's environment cannot be assimilated, sudden spikes or 'critical
216 fluctuations' occur during which the behavioural system appears to be in a degraded and
217 destabilised state until it adapts to new conditions. Similar findings (Baumeister, 1994;
218 Mahoney, 1982) suggest that psychological disequilibrium as well as distress, disturbance
219 and dissonance are common before important life changes.

220 Periods of confusion and disorganisation are an integral part of growth preceding
221 change in Hager's (1992) psychological 'model of chaos and growth'. During 'chaotic
222 states of mind', the author argues, individuals are drawn to a reorganising activity
223 adopting more adaptive patterns; a chaotic state, in this case, is seen as an indication of
224 progression rather than resistance or regression. Hager does not regard the stages during
225 which the patient appears disorganised and confused, as indicating resistance or
226 ambivalence toward treatment but rather as periods of reorganisation and adaptation to
227 new information. As such, periods of relapse to previous behaviours might be interpreted
228 as 'incubation periods' during which the person gathers and reappraises information
229 before they move onto a new way of living. These 'gestation stages', as Hager names

230 them, entail a degree of discomfort, not least because personal change and reconstruction
231 involve being confronted with an unfamiliar and unpredictable future. By gradually
232 integrating diverse and antagonistic experiences, the person's whole representational
233 world becomes more inclusive and adapts to the new conditions¹. Similarly, Hayes et al.
234 (2007) notice similar discontinuous movements before positive change is observed in
235 patients with depression, whereby initial improvements could often be followed by
236 periods of increased disturbances and worsening of the symptoms (depression spike),
237 before mood is eventually stabilised.

238

239 **2.4. Process of change in addiction**

240

241 Process research in addiction has not been scarce and has mainly focussed on factors that
242 might influence individual pathways towards recovery. For example, cognitive appraisal
243 of the pros and cons before change (Sobell et al., 2001), psychosocial processes of
244 identity reconstruction (McIntosh & McKeganey, 2000; Biernacki, 1986), viewing
245 (cannabis) use as less positive (Ellingstad, Sobell, Sobell, Eickleberry, & Golden, 2006),
246 as well as the importance of supportive contextual elements that facilitate the 'way out'
247 of addiction (Waldorf, Reinerman, & Murphy, 1991), have been identified as possible
248 ways of achieving recovery.

249 Prochaska and DiClemente's Transtheoretical Model (TTM) and their Stages of
250 Change Model (SCM), presents change as a gradual and staged event that lasts for about
251 7-10 years (Prochaska & DiClemente, 1984). The model suggests five stages through
252 which the individual progresses, employing strategies to move from one stage to the next
253 (Prochaska, Velicer, DiClemente, & Fava, 1988), with return to prior stages not being
254 uncommon. The model has been heavily criticised for the lack of distinct and clear stages

¹ It is useful to note the misconceptions surrounding the use of the term 'chaos' which result in the associations of the term with randomness and unpredictability. These misconceptions originate usually from the unscientific use of the term or its use as a metaphor. However, the main element of chaotic systems is their sensitive dependence on initial conditions with big changes in future states, occurring after only minor errors in measurement of the initial conditions (Kincanon & Powel, 1995). In this context, although Hager implies non-linear motions in human behaviour, he does not clearly define the term 'chaos'. Although non-linearity is inherent in chaotic states it can be found in other systems too. In this case, it is not clear if treatment is perceived as change in initial conditions that could cause chaotic behaviour and it can be assumed that the term 'chaos' is used as a metaphor of random and unpredictable behaviour.

255 or the assumption of conscious decision-making change that make it a model with
256 questionable theoretical coherence and applicability (Burrowes & Needs, 2008; West,
257 2005). Despite the criticism, the SCM suggests identifiable ‘turning points’, important
258 moments in the lives of addicted individuals that lead to the decision to give up
259 substances and presents change as a long lasting, discontinuous process, as the model
260 allows the possibility of relapse and regression to previous stages.

261 On the other hand, change in addiction has also been described as a sudden event.
262 Miller, who focused on the dramatic epiphanies some members of Alcoholics
263 Anonymous (AA) experience (Miller, 2004), demonstrated how the directionality of
264 change is influenced by turning points. What the authors described as ‘quantum change’
265 were sudden and profound changes preceded by intense disturbances such as loss and
266 distress; generating, in turn, a deep shift in both the individuals’ values and behaviours
267 (Miller & C’de Baca,1994; 2001).

268 Although quantum change, as described by Miller (2004) appears to be sudden,
269 with vivid and dramatic manifestations, it is not commonly found in therapeutic change.
270 On the contrary, when sudden changes appear, this is usually a sign that clients’
271 problems will return, ‘often with vengeance’ (Bien, 2004). Other studies, for example,
272 document ‘spikes’ in change patterns, large symptomatic improvements that occur during
273 the early stages of Cognitive Behavioural Treatment (CBT) for depression (Rush,
274 Kovacs, Beck, Weissenburger & Hollon, 1981) with very little improvement after that
275 point (Ilardi & Craighead, 1994). However, it appears that sudden improvements and
276 sudden moments of realisation are part of a more gradual continuum, a ‘peak’, a cut-off
277 point when behaviour change appears to be more noticeable although still occurring as
278 part of a more timely process. Gianakis and Carey (2011) studied patients who have been
279 through psychological distress and naturally changed without psychotherapy, and
280 documented that the change occurred through several sudden and vivid moments of
281 realisation after which change was considered as the only option. One of their most
282 important findings was the notion of the ‘threshold’, a moment experienced by
283 individuals with intense emotions which led to the realisation that change was necessary.

284 An important theoretical contribution in the field of addiction, which takes into
285 account the dynamic aspects of human nature and acknowledges the fact that human
286 behaviour appears chaotic the same way as weather patterns do, is West’s (2006: 218-
287 228) argument that psychological systems are dynamic and inherently unstable yet, they
288 are also adaptable and remain stable by constant balancing external environmental inputs.

289 West argues for a ‘homeodynamic’ system in constant flux which balances itself by
290 frequent checks of environmental inputs to avoid descending into ‘chaos’. Change-or
291 redirection towards a new pathway takes place either with the contribution of a single
292 event or gradually, through succession of small events.
293

294 **3. Method**

295 **3.1. Aims & Method**

296 This study focuses on the process of change from addiction to recovery and
297 specifically on the directionality/linearity of the recovery process at two levels: first,
298 exploring the experience during addiction and at different stages of recovery, as
299 expressed in the narrative discourse through which such experiences are reconstructed for
300 the researcher. Secondly, by reconstructing the directionality of the narratives to gauge
301 the shape of the trajectories, the recovery phases and relapses, viewing individual
302 movement from different positions in the path. The dynamics of change in the process of
303 recovery from addiction are explored here through autobiographical narratives. Accounts
304 of personal experiences can reveal the interplay of external and internal factors, highlight
305 subjective causality and ascription of responsibility, and in so doing help understanding
306 the qualitative changes through which participants gain agency and control (Bruner 2003;
307 2004; Flick, 1999; Riessman, 2008).

308 Causal explanations (in this instance the assumed direct causality between
309 treatment and change) can be considered as the foundation behind the logical–scientific
310 paradigm of the natural sciences and aim for generalizable results. On the other hand,
311 narratives are individually constructed, can be context-specific and provide detailed
312 information about time, place, events and processes (Elliott, 2005). In recent years, an
313 increasing number of researchers have focussed in the way people construct stories about
314 their lives. Such stories are not regarded as simple records of past history but a biography
315 build out of emotionally and socially evaluated events (Labov, 1997). Narratives, in this
316 sense, are not static entities but are constantly evolving and stretching their boundaries
317 according to social and personal circumstances and context (Antaki, Condor, & Levine,
318 1996). Narratives or personal myths are therefore flexible as they are constructed in order
319 to communicate and define someone’s identity, both for themselves as well as for their
320 audience (McAdams, 1993). In this paper we employ the constructivist approach

321 influenced by the methodological and theoretical framework of narrative criminology,
322 taking the stance that reality is narratively constituted and narratives shape our
323 experience in a reciprocal relationship (Presser 2008, 2009; Sandberg, 2010; Presser &
324 Sandberg, 2015). Narrative, in this context, is presented as constitutive of reality and not
325 representative, it does not have a fixed essence but is shaped through interaction and
326 constructed under the influence of social factors, language and culture. A narrative is
327 important because as a “temporally ordered statement concerning events experienced by
328 and/or actions of one or more protagonists”, is a mechanism through which identity can
329 be thoroughly examined articulating motivation for past actions but also plans and
330 intentions for the future (Presser, 2009: 178–179).

331 With this position in mind, we are confronted with yet another ontological feat to
332 define whether narratives could provide ‘true’ answers. Guided by the spirit of post-
333 positivism, narrative truth represents the debate into whether the told story represents the
334 factual reality, ‘the conflict between what is true and what is tellable’ (Spence, 1984: 62).
335 Admittedly, this problem can be encountered in any case of retrospective accounts,
336 however the debate of narrative versus historical truth is closely related to the way we
337 understand what narratives are communicating in relation to one’s self and identity. A
338 sharp distinction between narrative and historical truth, however, is not perhaps as clear
339 as is commonly thought (Bruner, 1991:13); historical truth can be seen not as a real
340 object but as an approximation, a conjunction and a reproduction of the data available to
341 us (Sarbin, 1986: 197). Keeping in mind the elasticity of narratives, the fact that they are
342 constantly reconstructed in order to convey a particular viewpoint and portray the
343 narrator in front of their audience, we regard autobiographical remembering as conducted
344 in relation to one’s current life perspective. This perspective and personal situations will
345 differ and any recollected events will also be emotionally and socially evaluated, in
346 relation to individual situations. Therefore, the aim of this paper would not be to
347 determine objectively the process of change, but to look at how pathways out of
348 addictions are personally experienced and constructed.

349
350

351 **3.1. Data collection (11)**

352 Data collection took place in a city in the South of England, at a time when a recovery
353 community was gradually developing. Before the start of the project, the research team

354 attended several service user groups, where the aims of the research were explained. The
355 recruitment method used here, Respondent Driven Sampling (RDS), is a snowball technique
356 which is considered more effective than traditional sampling methods when recruiting
357 ‘hidden populations’ (Abdul Quader et al., 2006; Heckathorn, 1997; Robinson et al., 2006),
358 as the participants themselves are recruiting members of the community that would be hard to
359 reach by researchers. ‘Hardcore’ active users were especially difficult to find as they could
360 not be approached through treatment services or any other official route, as their “activities
361 are clandestine and therefore concealed from the view of mainstream society and agencies of
362 social control” (Watters & Biernacki, 1989: 417). The prospective participants of this study
363 fulfilled the criteria of ‘hidden populations’ as described by Heckathorn (1997): firstly the
364 lack of a sampling frame , as the size and boundaries of the population are unknown and
365 secondly the strong privacy concerns as the focus of the study involves stigmatised or illegal
366 behaviour. Both criteria make such populations rare and traditional sampling methods
367 ineffective. In this case, recruitment of people involved with illegal activities is more
368 effectively conducted through other people in the same position (Fleetwood, 2013) and in this
369 case, RDS proved to be an especially valuable method.

370

371 The first participants were provided with advertising flyers and were asked to pass them on to
372 individuals who were either in active use or in recovery, resulting in twenty-one in-depth
373 interviews with eight active drug users and alcohol dependent, and thirteen users in recovery.
374 Recovering users were approached through several treatment services in the specific area,
375 while active users were located through the method described above.

376 In view of the above, the sample was necessarily purposive and data collection was
377 conducted until new information, themes and trajectories stopped emerging (data saturation).

378

379 *3.1.1. Stages of recovery*

380 The term ‘in recovery’ proved to be operationally problematic in that it was too broad
381 to cover the differentiation of individuals at different stages of the process. Since recovery is
382 a journey taken up in different ways by different individuals, there is no consensus over the
383 exact time frame at which someone might be considered as ‘recovered’. The term ‘recovered’
384 is in itself questionable, as the danger of relapse is always imminent even for users who
385 consider themselves in recovery, and as a result there is no proof that this absolute point of
386 ‘cure’ exists. Research, however, shows that the stability of recovery increases and the

387 chance of relapse decreases between the fourth, fifth and sixth year of abstinence (Edwards et
388 al., 1977; Vaillant, 1996; Jin et al, 1998). One of the most widely used definitions of
389 recovery, the one provided by the Betty Ford Institute (2007), drawing on an ample basis of
390 research findings, establishes the following stages: early recovery (from 1 month to less than
391 a year of abstinence), sustained recovery (at least a year but less than 5 years) and stable
392 recovery (at least 5 years). In this study, interviewees were in different stages, some in the
393 very beginning and some counting many years in recovery (see Table 1 for the characteristics
394 of participants across the stages). Acknowledging the limitations of the term 'in recovery',
395 the above definition is used more as a way of organising the participants and reporting the
396 findings rather than excluding any other form of categorisation.

397 Among the participants there were three individuals on methadone maintenance.
398 There has been considerable disagreement about whether methadone users are regarded as
399 being in recovery or not (Rounsaville, Kosten, & Kleber, 1987; The Betty Ford Institute
400 Consensus Panel, 2007). This initiated from different practices and definitions of recovery
401 (e.g. total abstinence from any substance is a prerequisite for inclusion in groups such as the
402 AA) although methadone maintenance programs can be the first step towards abstinence. An
403 important consequence of this narrow definition is the stigmatisation that accompanies the
404 denial of the status of recovery to individuals who are stabilised on methadone. White, a
405 historian and activist of recovery, warns against the use of such definitions in that they could
406 determine inclusion, exclusion or access to treatment services as well as favour social stigma:

407 "A particular definition of recovery, by defining who is and is not in recovery, may
408 also dictate who is seen as socially redeemed and who remains stigmatised, who is hired and
409 who is fired, who remains free and who goes to jail, who remains in a marriage and who is
410 divorced, who retains and who loses custody of their children, and who receives and who is
411 denied government benefits." (White, 2007).

412 Participants who reported as being in recovery were considered as such and the use of
413 methadone was considered as a step into recovery. Exclusion from the recovery category
414 would be applied if the individual was additionally using street drugs 'on top' of their
415 methadone script, although there was no such case reported. Moreover, some of the
416 participants had preferred to cut down their use instead of going 'cold turkey' or taking a
417 substitute, creating difficulties in the inclusion within categories. For some, recovery meant
418 total abstinence, and for others this was gradually cutting down on their use. This is a
419 problem previously encountered in studies of change (Gianakis & Carey, 2011) as well as in
420 the definition of drug use and relapse (Miller, 1996). It also depends greatly on the kind of

421 treatment every individual is receiving, as different services have different approaches to
422 recovery and responses to relapse. That was the case for two participants who self-reported as
423 being in recovery although they made occasional drug use but considered this as progress
424 compared to their previous state. After their interviews and plotting their trajectories into
425 graphs, however, it appeared and this was progress-an increment- compared their previous
426 heavy active use. Because of the focus of this study on individual interpretations and
427 evaluations of events in their recovery, the two participants were allocated to the recovery
428 group even though occasional use was noted on the graph.

429 3.1.2. Participants and interviews

430

431 The average age of the group was 39.9 years. All the interviews were conducted
432 between June and August 2011 in a designated room in the host university. After being given
433 a description of the study, all participants were asked to narrate their life story from the
434 earliest point they could remember until the day of the interview. Interviews varied
435 considerably in length, from 15 to 58 minutes, the shorter ones belonging to active users, as
436 illustrated below. The aim of the study was explained before the beginning of every
437 interview, and every participant was reassured that confidentiality would be kept at all times.
438 Permission was gained in order to use quotes from their narratives explaining that, in such
439 case, no information that would lead to their identification would be given out. Participants
440 signed an informed consent form in the beginning of the interview and received a debriefing
441 form at the end of it. The study had been approved by the Ethics Committee of the host
442 university.

443

Name	Age	Gender	Drug of choice	Status
Jane	47	F	Alcohol	Active
Chloe	38	F	Heroin	Active
Molly	43	F	Heroin	Active
Janine	28	F	Heroin	Active
Kathy	65	F	Alcohol	Active
Tina	32	F	Heroin	Active
Rob	29	M	Polydrug	Active
Matt	35	M	Polydrug	Active
Peter	29	M	Heroin	Early recovery (methadone)
Maria	34	F	Heroin	Early recovery (methadone)
Ricky	50	M	Alcohol	Early recovery
Malc	26	M	Polydrug	Early recovery
Ronnie	40	M	Polydrug	Early recovery
Frankie	36	M	Speed	Sustained recovery
Graham	50	M	Alcohol	Sustained recovery
Erin	32	F	Polydrug	Sustained recovery
John	42	M	Crack cocaine	Sustained recovery
Abe	27	M	Cocaine	Stable recovery
Ken	55	M	Alcohol	Stable recovery
Ross	60	M	Heroin	Stable recovery (methadone)
Lisa	54	F	Alcohol	Stable recovery

444

445 Participants were encouraged to narrate their life, starting from the earliest point
446 they could recall until the day of their interview. Specific attention was given to periods
447 of abstinence and relapse, participation in treatment or self-help groups, explanations of
448 recovery and reflections on the process that might have led to this decision. Participants
449 were free to construct their narratives in their own way, although prompting questions
450 were also used in order to provide chronological guidance. These included and eliciting
451 details about different phases when participants were unsure of the sequence (e.g. What
452 happened next? How do you remember yourself at this point of your life?). The
453 interviews were recorded with a dictaphone and all recordings were transcribed verbatim.
454 All participants' names have been altered to ensure confidentiality.

455

456 3.2. Analytical method

457 Gergen and Gergen (1983) argue that narratives are the means by which people select
458 events and link them through evaluative comparison, to make sense of their cross-time
459 trajectory. According to the authors, it is not single events which dictate the shape of life
460 story, but the life story as a whole – its overall narrative form - which assigns meaning to
461 single events. For example, “stability narrative is a narrative that links incidents, images,
462 or concepts in such a way that the individual remains essentially unchanged with respect

463 to evaluative position” (p.264). Stability narratives are contrasted with progressive and
464 regressive narratives, in which either increments or decrements characterise movement
465 along the evaluative dimension over time. Gergen and Gergen’s narrative typology
466 (1983) inspired the analytical approach of this study, as it is particularly apt to capture
467 the general narrative structure of an autobiographical interview while keeping track of
468 the internal variations and shifts.

469 Recursive reading of the interview transcripts helped initially to identify features
470 of the narratives in relation to temporality; these included descriptions of routines and
471 any iterative activity, punctual events, perspective on the past and future. Audio-
472 recordings relative to the selected excerpts were listened again to refine transcription and
473 ensure correct understanding. Each life story was considered as a whole in the
474 interpretation of the excerpts, and narrative analysis was applied to understand the
475 autobiographical accounts in their entirety and to interpret single episodes that were
476 recalled. The analysis sought to identify salient features of the lived temporality of
477 substance abuse, different stages of recovery and long term abstinence.

478 Gergen and Gergen’s (1983) model was additionally employed in order to attempt
479 a more synthetic rendition of the trajectories, only relative to the period from substance
480 abuse to recovery. After analysing and synthesising each narrative to a timeline, outlining
481 the process from active use to the present, we identified ‘stable’, ‘progressive’ and
482 ‘regressive’ phases within the narratives. The whole narrative was then graphically
483 represented for a more immediate apprehension of the trajectories. This analytical
484 approach was applied to all the narratives, regardless the active or recovering status of
485 the participants.

486 This paper is part of a larger project which examined the process of change from
487 addiction to recovery. An in-depth analysis of the interviews documenting salient
488 features of the phenomenological aspects as well as the social sphere of addiction and
489 recovery is included in (Kougiali, 2015) and will not be repeated here, as the present
490 study is focussing on the directionality of recovery. Quotes from active users are only
491 used here as a means of a better understanding of the data, while the main focus of the
492 analysis will be the trajectories of the recovering users.

493

494 3.2.2. A note on participants' narratives

495 The evolving nature of personal narratives is of specific interest when considering
496 the data analysed in this paper for two reasons: Firstly, narratives are central in treatment
497 for substance using individuals, for example, storytelling is central in AA/NA meetings.
498 It was also evident that the stories were vividly constructed based on discursive formats
499 drawn from the participants' social context, and from narratives which were already
500 available to them (Atkinson & Coffey, 2003) about the treatment environment.
501 Individuals in recovery had been through a process of restructuring their life stories in a
502 way that made sense to their new recovering identity, gave an explanation to their past
503 actions and choices and provided aims and goals for the maintenance of a future
504 sober/abstinent self. Given that all participants were part of the same recovery
505 community and had access to the same treatment services, there was a uniformity in the
506 structure of the narratives and the way explanations of past use and recovery oriented
507 goals were presented.

508 In addition to this uniformity of structure, participants often used therapeutic and
509 psychological terminology, which was accompanied by scholarly definitions of the terms
510 for the enlightenment of the interviewer. The use of terminology varied between the
511 participants; some of those in early recovery would be fascinated by the new information
512 representing the opening of new opportunities and would often speak in the language of a
513 practitioner in order to offer explanations about their use and episodes of relapse.
514 Recovering users' narratives also differed in the way they represented themselves. Those
515 in early recovery would still identify with a 'user' identity, while those in long term
516 recovery would often distance themselves from that role (usually with references to
517 active and early recovering users as 'them'). The use of different substances did not
518 affect the structure of the stories or the episodes and frequency of relapses; however it is
519 worth noting that substance users were often more involved with the criminal justice
520 system in comparison to problematic drinkers.

521 Active users' narratives differed in many aspects. Those who had never been in
522 touch with treatment services would appear to have (in cases significantly) unstructured
523 stories, whereby events were not always narrated in a logical temporal order. Episodes or
524 periods of heavy drug use would not be followed by a reflection or explanation.
525 Similarly, their narratives were characterised by repetition and adherence to the present,
526 most often without reference to future plans and goals. Yet, the difference in narrative
527 structure, linguistic devices and content was discernible in the narratives of active users

528 who had been, even briefly, through treatment. In this case, the plot would be enriched
 529 with some degree of reflection and appear temporally ordered more logically having
 530 more similarities with the ‘recovery’ stories in terms of structure, albeit being consistent
 531 with the living experience of active use.

532

533 **4. ANALYSIS**

534 **4.1. Trapped in the cycle**

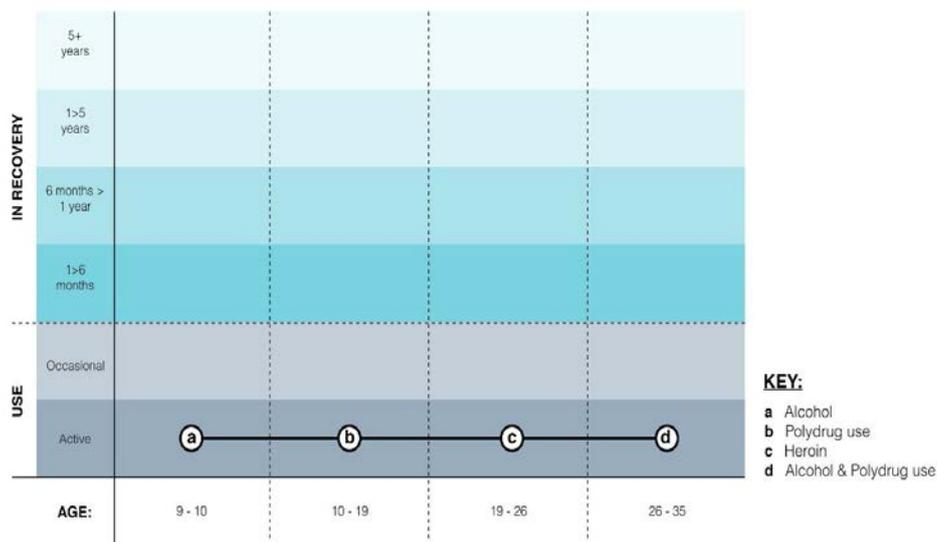
535

536 A pattern of continuous effort and frequent relapse was found in all categories of
 537 participants regardless their stage of recovery, while relapse was found in all life stories,
 538 including those from participants who had achieved long term recovery. The only life
 539 story that appeared linear, stable and without fluctuations was the one narrated by those
 540 active users that had made no attempts to abstinence and/or recovery, such as Matt’s, the
 541 active polydrug user with a long history of alcoholism represented in Fig.1.

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550 Below is an excerpt from Matt's story:

551 Matt: sniffing glue, acid, doing acid, lots of acid uhm and going to pubs, all this time
552 in the pub, pub pub pub pub pub pub. So I've done that, amphetamine for 9
553 years, a lot of amphetamine, I went crazy, I just stopped the amphetamine, so
554 I stopped the amphetamine for 9 years, then I said fuck that and I started
555 heroin to slow me down

556

557 It is noticeable that Matt presents his story as exclusively comprised of
558 interchangeable episodes of drug use. Other life events in his narrative were generally
559 absent, while it appeared that the substances, listed one after the other, had fully occupied
560 his life so far. His narrative identifies periods marked by the use of different substances
561 (*sniffing glue, doing acid, and going to pubs, amphetamine for nine years, I started*
562 *heroin*) and the times in which the effects became unmanageable (*I went crazy I just*
563 *stopped the amphetamine*). Although he counted 26 years in active addiction, Matt did
564 not seek professional help even when the effects of his use caused him serious mental
565 health problems. Instead he changed the drug of choice, and made no effort of abstaining,
566 contributing to a 'flat' and linear trajectory of repeated drug use that overshadowed every
567 other aspect of the his life.

568 Unlike Matt, most interviewees, including active users, reported a continuous
569 struggle and efforts to stop drinking and/or using drugs. Initial attempts were made with
570 visits to detoxification centres or hospitals or through maintenance therapies (mostly
571 Subutex or methadone²). These efforts were most often unsuccessful, and were followed
572 by relapses and return to previous states of active use. Attempts at quitting were often
573 combined with a feeling of despair, and the participants often expressed a fatalistic fear
574 that they would never be able to maintain abstinence despite their best efforts. Tina,
575 below, a chronic heroin user still in active use at the time of the interview, offered a very
576 effective description of the cycle of detox and relapse:

577 Tina: I relapsed. Got back on the crack. Got back on the gear. Got back to jail. I've
578 done-I got 12 months I've done 6 months. I got back on the gear. And then
579 throughout like the next 5 years I tried to get clean load and loads of times
580 on subutex. I think I maintained staying abstinent but just on subutex. For

² Drug maintenance, substitution or replacement therapy involves the substitution of an illegal drug, such as heroin, with a legal one such as methadone or buprenorphine (usually found under the trade name Subutex).

581 about 8 months. And then got back on the gear (...) I'm not- gonna give up.
582 It's so like - I don't know the gear is fucking mad. It's fuckin' mad. As
583 while as you're doing it it's good as everything. Is-it-it steals sort of-it's got
584 ya. It's gonna get me for the rest of my life. It might get easier but it's
585 always going to be there. And it's such a fine line between being on it and
586 being of it. It's mad isn't it?

587

588 Tina started her narration describing her childhood years and how she was a child
589 with a promising future, then going into how soon after the death of her father,
590 experiencing several emotional difficulties, she resorted to drugs. Her description above,
591 which shared common elements with other active users' life stories, offers the account of
592 an inescapable cyclical life with an admission of her powerlessness over drugs. Even
593 though Tina is also an active user, her trajectory is not flat and linear like Matt's but is
594 interrupted by her efforts to remain abstinent. Even if her efforts were followed by
595 relapse, her trajectory pattern demonstrates progressive as well as regressive points. Her
596 quote shows the fractured timeline of initial recovery attempts accompanied with traces
597 of both fear, inescapability and fatalism (*it steals sort of-it's got ya. It's gonna get me for*
598 *the rest of my life*), as well a big effort and determination that goes against the power of
599 the substance (*I am not gonna give up*).

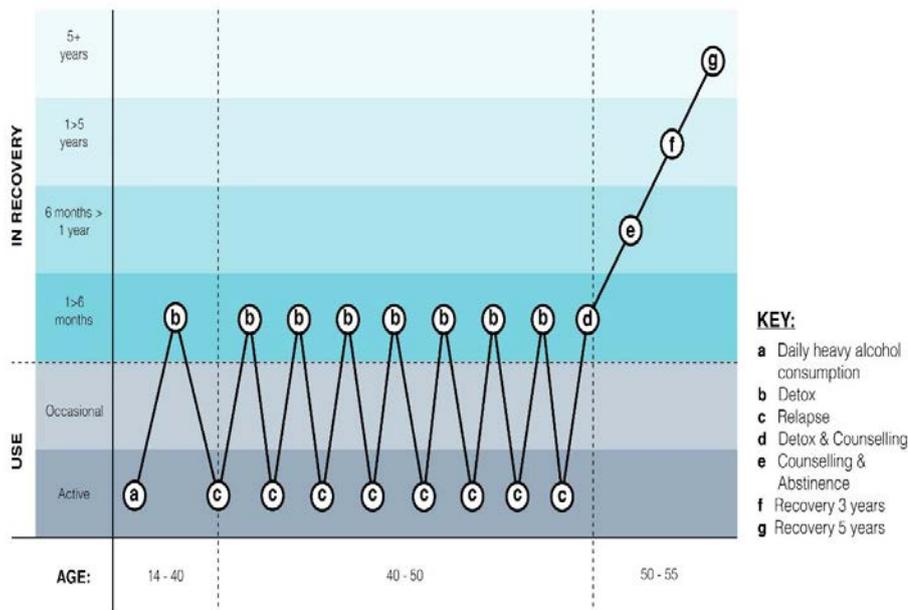
600 This continuous effort was recalled by users in recovery although their
601 descriptions were more emotionally distanced from the angst of the constant effort and
602 were not described as vividly as in Tina's quote. Ken was in stable recovery; after twenty
603 years of heavy drinking the deterioration of his health made detoxing a necessity. Ken,
604 unlike Tina who was trapped in the cycle of dependency, was now able to understand his
605 numerous relapses because of his work as facilitator of a self-help group:

606 Ken: The end went on to five years, I had periods of recovery but then I'd always
607 relapse which I understand now working with those people (. . .) I think
608 because I've been into detox years and years-over the years- I think every
609 time I went in, a little bit of something a little drip was coming and when
610 realisation came even though I had a lot of counselling at the time I think
611 that drip-drip-what I've learned over the previous admissions all came
612 into one.

613

614

615 Ken, now being able to comment on his whole trajectory, recalls that *'the end'*,
 616 which started when he realised he had to stop drinking to maintain abstinence, lasted five
 617 years. Ken reported a series of failed attempts (*I'd always relapse*), highlighting the
 618 frequency with which every attempt for recovery was followed by relapse episodes
 619 (*always*). The intensity of his effort as well as his perseverance were evident,
 620 considering the numerous times he had been in hospital for detox but also his perception
 621 that this covered a considerably long period, which may have been perceived to be even
 622 longer (*I've been into detox years and years over the years*). We can observe in Ken's
 623 graph (fig.2), that despite his repeated relapses and his numerous admissions, he
 624 eventually achieved long term recovery, but he recalls how it all seemed at the time
 625 almost pointless, since his numerous attempts were followed *'always'* by failure and he
 626 only understood the reason for that *'now'*. Like Ken, users who had succeeded in
 627 maintaining abstinence and were in later stages of recovery never attributed it exclusively
 628 to one type of treatment or a single event. Rather than change being ascribed to the
 629 radical effect of one of the treatments it was instead reported as a process of
 630 accumulating knowledge *'drip-drip'* through relapses and various successful and
 631 unsuccessful treatment attempts, which gradually resulted in increased self-awareness
 632 and knowledge on what would work or not for them.



633 Although sudden changes that bring individuals to states of realisation and
 634 awareness have been found repeatedly (Miller & C'de Baca, 1994, 2001; Miller, 2004)
 635 and specifically amongst members of AA, there was only one such report amongst our
 636

637 participants. Lisa, having been dependent on alcohol, had been in treatment for about a
638 year when she described such an episode of realisation:

639 Lisa: I'd go to a meeting every evening and I used to start feeling that was
640 good. But when I left that meeting there was a strong loneliness in me.
641 It was weird. It was like "God, what is this?" And I remember that
642 one day I left the meeting and the loneliness was gone. It was like even
643 I might be walking alone on my own, I didn't feel lonely anymore. It
644 was like I was part of a big thing that was there.

645 Interviewer: When did that happen?

646 Lisa: It was not long it took about a year after, so about 5 years ago. It was
647 weird. It was in a real in depth loneliness and then I said 'wow'. It was
648 like a real warm glow. Something had cracked there somewhere. Like
649 the realisation.

650

651 Although Lisa described her experience in terms that resembles Miller's (date)
652 quantum change, the 'realisation' occurred in a broader context of a recovery journey. The
653 'epiphany' accompanied with all its characteristics the 'warm glow' and the 'realisation' did
654 not occur suddenly but took place after a year of abstinence and attendance of AA meetings.
655 The moment of realisation was a 'peak' moment incorporated in a gradual journey, cultivated
656 for five years within the social context of a recovery group. What was experienced by the
657 participant agrees more with Gianakis and Carey's (2011) findings, which documented
658 several vivid and sudden moments such as the one described (*It was in a real in depth
659 loneliness and then I said wow. It was like a real warm glow. Something had cracked there
660 somewhere. Like the realisation*), as part of a gradual process that eventually leads to
661 behaviour change. Despite this moment of 'epiphany', the road to recovery was equally
662 gradual in terms of personal development, when compared to narratives where no such
663 realisation occurred. This moment of realisation initiated the process of change but did not
664 expedite it.

665

666 **4.2. The seeds of change**

667 John, two years in recovery at the time of the interview, gave a powerful
668 description of his life in the streets as a 'dog eat dog war' and 'survival of the fittest'. He
669 depicted himself as someone that had always been cold-hearted and never experienced an

670 emotion. He reported that his lifelong mistrust toward others, once a way of survival in
671 the streets, was the biggest barrier he had to overcome when he entered into recovery.
672 This was initially addressed during his admission to a treatment program and although
673 this did not have an immediate effect, things started ‘making sense’ years later:

674

675 John: So I left there the same way as I got in, came out, got bored, picked up a drink.
676 But that treatment centre. Everything that they taught me came true. If I ever
677 listened. Because all that they said, in reality would come true. But they
678 planted the seed.

679

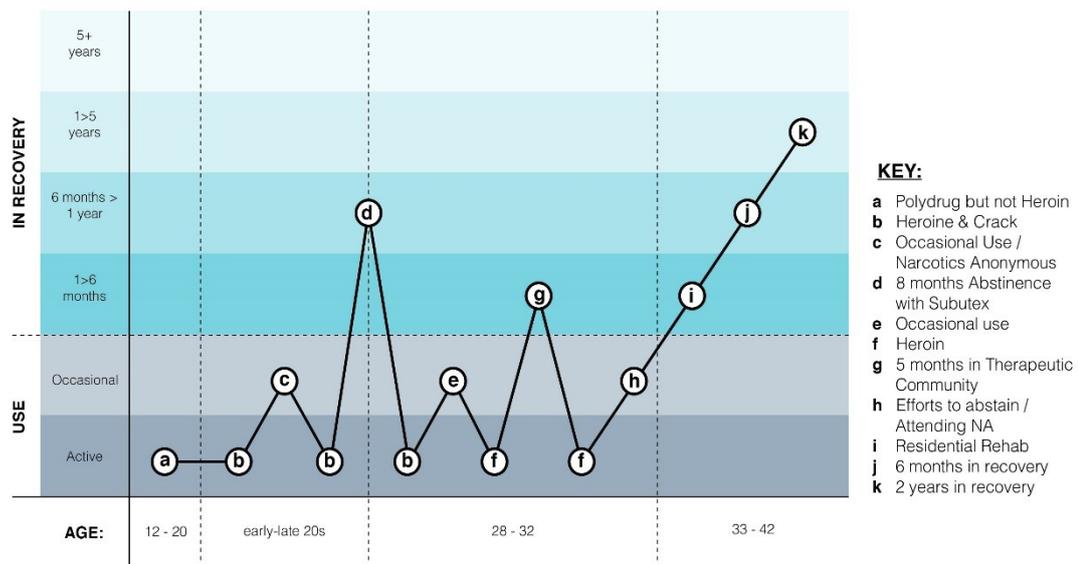
680 At the time when he first left the treatment, John felt like nothing had changed and
681 that his problem with crack cocaine had not been addressed (*I left there the same way as I got*
682 *in*). He describes what appears to be a routine and expected relapse (*came out, got bored,*
683 *picked up a drink*). John, however, realised, the value of that treatment, and implies here that
684 things would have turned out in a different way if he had accepted earlier what he had learned
685 (*if I ever listened*). What he realises now as the value of treatment is expressed with extreme
686 case formulations³ (Pomerantz, 1986) – (*everything that they taught me/ all that they said, in*
687 *reality would come true*) demonstrating how he can trace back and connect events in his life
688 making sense of the past and the present. Using the metaphor of a seed that is planted, John
689 acknowledges the initiation of a process of sense making that would be deep, as a seed
690 planted in the ground, as well as long lasting one resembling the time needed before the seed
691 grows. After 27 years, John re-enters treatment and recalls:

692 John: And it got so deep that going to treatment twenty-seven years later for a second
693 time that stuff got up, all the childhood, that secret that I kept for many years
694 and I used on that, I didn’t know any other way (...) I’d let nobody in into my
695 little cocoon, my little world until I came into treatment for second time. And
696 then I started letting people in into my life, talk about my childhood experiences
697 growing up, to trust.

698

³ Pomerantz (1986) discusses the conversational uses of Extreme Case Formulations, extreme expressions such as all, none, best, least, as good as it gets, always, absolutely, perfectly used as rhetoric devices to illustrate activities such as complaining, justifying, accusing, legitimising, defending.

699 On that second attempt and with the appropriate support, John appears to be making
700 the first changes in lifelong beliefs, as well as acknowledging traumatic experiences that he
701 had kept hidden for a long time. He identified characteristics of himself (*I'd let nobody in*
702 *into my little cocoon*) as well as the reasons behind his drug use (*that secret that I kept for*
703 *many years and I used on that, I didn't know any other way*), here traced back to his
704 childhood. Connecting the reasons and with reflective self-understanding, he offers new ways
705 of dealing with things and a new version of himself. Having described himself elsewhere in
706 his interview (see Kougiali, 2015) as being in a 'survival mode' and his life in the streets as a
707 'dog eat dog war' whereby mistrust was a way to protect himself, he now describes the
708 process of regaining, or finding anew, his ability to trust others (*And then I started letting*
709 *people in into my life, talk about my childhood experiences growing up, to trust*). It is notable
710 in John's extract, as in Ken's earlier, that the process that led from active use to recovery was
711 a long lasting one, making their lives consisting in their biggest part of active use and the
712 latest few years of their attempt for recovery. It is understandable that coping strategies that
713 have lasted for a lifetime could not be deleted or altered drastically. John's trajectory (fig. 3)
714 does not have as many fluctuations as Ken's, however, it is also discontinuous with
715 regressive and progressive movement between periods of abstinence and relapse with
716 adequate treatment for the 'seed' to be planted and enough relapses to challenge his beliefs
717 and reflect on his drug use.



718
719
720
721

722 Interestingly, other participants in recovery offered similar explanations: heavy drug
723 use or drinking was the means by which powerful negative feelings were numbed, and
724 recovery was marked by the identification and the steps taken towards resolving a
725 psychological problem deeply rooted in the past (see also Fasulo, 2007). Although this was
726 often pointed out to them during the first attempts of treatment, things only made sense later
727 and thoughts were reflected upon after the lapse of time during which they had returned to
728 active use. Maria still in early recovery, described what happened to her after reasons behind
729 her use were pointed out to her and how this ‘*messed up with her using*’:

730

731 Maria: Once you get told about that (the reasons behind drug use), is like a seed
732 gets planted in your head and when you do use you know that there is a
733 different way and when you had little bits of treatment here and there it
734 kind of messes up with your using

735

736 Maria, acknowledges that when issues are pointed out in treatment, reflection
737 cannot be avoided (*Once you get told about that, is like a seed gets planted in your head*).
738 Users in recovery often identified the reasons behind their use as a way of coping with a
739 particular problem. Maria, having identified the lack of acceptance as her main reason for
740 taking heroine, in an earlier part of her interview, now tells us that what is told in
741 treatment sessions challenges individual beliefs about coping strategies (*when you do use
742 you know that there is a different way*). This knowledge, in turn, changes the way one
743 experiences the highs of a substance, as their main reason for using has been questioned
744 (*it kind of messes up with your using*). Maria went on to describe that this initial
745 knowledge gradually built from ‘*little bits of treatment here and there*’, which also
746 affected the way she experienced episodes relapse, as she could distance herself more and
747 reflect on why she went back to using every time.

748 Although long term recovery is a well-established outcome, the cycle of relapse
749 and abstinence is also well known to researchers and clinicians (Lash, Petersen,
750 O'Connor Jr, & Lehmann, 2001; McKay et al., 1997). However, as argued above, relapse
751 has usually been regarded as a result of treatment ineffectiveness, users’ lack of
752 motivation to change or simply either treatments’ or individual failure. Relapse, as
753 presented in this article, is commonly found in substance using trajectories but is argued
754 not to be the result of a problem or failure of treatment, but should be rather seen as an
755 intrinsic part of a process through which knowledge that leads to recovery is gathered.

756

757 **5. Discussion**

758

759 This paper focused in the exploration of the directionality of recovery and
760 highlights change as a discontinuous, non-linear, long-lasting process manifested in
761 alternating episodes of abstinence and relapse. Relapse, even though it may have been
762 experienced as a failure, viewed in the context of the overall process appeared to
763 contribute to rather than hinder change. In fact, both the process as well as the value of
764 relapse or treatment were understood only when viewed as a part of the whole trajectory.
765 Active users who had previously had some contact with treatment agencies and early
766 recovery users described this phase of subsequent episodes of relapse and abstinence as
767 particularly overwhelming, expressing a fatalistic fear of change being unattainable,
768 despite their best efforts. Users in sustained and stable recovery, however, specifically
769 pointed at this phase as containing crucial opportunities for learning better strategies to
770 cope with both the reasons that had driven them toward using and the craving for the
771 substance as such. One of the advantages of the study design was the inclusion of
772 participants at different stages of recovery in a spectrum ranging from active users to
773 individuals who had been in recovery for 10 years. This range of participants across a
774 broad temporal spectrum of active use and recovery, allowed for the examination of the
775 way a certain stage in the process of recovery is experienced in real time, and how it is
776 interpreted retrospectively. Participants in sustained and stable recovery clearly identified
777 differences in successive stages of relapse after the ‘seeds of change’ had been planted;
778 they would analyse their own behaviours and the reasons for it even when they slipped
779 back into use, and each new period of abstinence would come with a new quality of
780 awareness.

781 In all cases of recovering users, change was not constructed as immediate, sudden
782 or linear. It is clear from the trajectories presented above that discontinuities, ups and
783 downs and the rise and fall-from different points every time are a common theme in
784 recovery stories. Patterns of recovery appear unique to every individual and although
785 treatment did not appear to secure a radical change, it contributed to recovery with a
786 cumulative rather than immediate effect. It has been argued before that no single
787 treatment for alcoholism appears to be superior than others, but different treatments and

788 perhaps the combination of treatments over time have something promising to offer
789 (Miller et al., 1995).

790 The discontinuous movement observed in the trajectories of the interviewees can
791 be regarded as part of a self-organising process that becomes stabilised gradually through
792 regressive and progressive movements. Periods of ups and downs are the result of new
793 incoming information that disrupt the stability and normality of the learnt addictive
794 behaviour, similar to the chaotic behaviour that precedes positive change as observed in
795 open systems. Recovery was constructed as a gradual and temporally distributed process
796 not divided into linear or even distinct progressive stages, but rather occurring in a back-
797 and-forth movement, a process through which new connections are made through
798 information gathered slowly. Small steps, here non-linear movements, can lead to long
799 term change. On the other hand, individuals like Matt, who do not import new feedback
800 from their environment, exhibit a stable, 'closed system' pattern of behaviour and as
801 there is no new incoming information, the addictive behaviour remains unaffected and
802 does not promote any movement that might otherwise lead to change. The findings agree
803 with West's argument that psychological systems are constantly rebalancing and
804 adapting with the input of new information. Redirection towards new pathways (change
805 in this instance), takes place either suddenly or gradually. However, this process in
806 West's theory proceeds only 'forward', while regressive movements (relapses) are not
807 taken into account. It would be also worth noting that not all human beings are exposed
808 to the same breadth of information that would enable a redirection in their pathway.

809 It is not customary to accept chaos and discontinuity as signs of progression and
810 growth (Hager, 1992). However, the only trajectory that appeared as linear and
811 continuous was the one found in active users that had made no attempt to cease their drug
812 use. As these participants had never been in touch with treatment services and their social
813 group consisted exclusively or mostly of active users, it can be argued that the lack of
814 influx of information that would challenge their beliefs and reasons for using, prevented
815 the initiation of any process or motivation to change.

816 **6. Conclusion**

817 This research had some key limitations. Firstly, the sample was small and not
818 representative of all kinds of drug-using populations and results were not interpreted
819 according to individuals' drug of choice. Moreover, most of the users in recovery came
820 from a similar socio-cultural treatment environment. Finally, users who had naturally

821 recovered have not been included in the sample of this study. An additional problem was
822 the definition of 'recovery' and the different interpretations by the participants.

823 The starting point of this article was to explore narrative constructs of the process
824 of change from addiction to recovery. Findings of the current study reveal change as a
825 non-linear process full of discontinuities, manifested in patterns of interchangeable states
826 of relapse and abstinence or treatment attempts. This process appeared initially as chaotic
827 but-in later stages of recovery-understood as an integral part of the process that precedes
828 change.

829 The representation of the process of change as non-linear demonstrates the need
830 for a move from the conventional essentialist (rather than systemic) view that sees
831 interventions as doing something "to" the individual in order to cause changes "in" the
832 individual. Relapse does not simply identify the failure of an individual to comply with a
833 specific treatment or failure of the treatment itself. The fluctuations across drug using
834 trajectories might indicate that an individual is going through a process of altering a long
835 held coping strategy, which could potentially be successful if supported accordingly.
836 Change does not appear to take place immediately after treatment and there is no panacea for
837 addiction, or pill for recovery. In this context, it can be argued that relapse and discontinuity
838 can be part of the process of change itself. Indeed, interpretation of relapse as failure might
839 have further implications (Mille, 1996) such as the possibility of an increase in addictive
840 behaviour, something which could have been avoided if relapse was considered as 'norm al'
841 and was accompanied by the appropriate support. Such individually tailored support would
842 tend to increase individuals' adherence to treatment services and could in addition lead to
843 further awareness if reasons behind this relapse were explored.

844 Questions on linearity of change are not solely of a philosophical or theoretical
845 nature but have implications for research and practice. There is a need to rethink how
846 change is conceptualised and measured. Disregarding long-term effects and potential
847 positive outcomes and attributing failure to users who are in the initial process of
848 building up necessary experience, reliance on pre-post measures could lead to false
849 conclusions. Periods of discontinuity preceding stabilisation of change last a lot longer
850 than a short-term research design can capture. Therefore, measuring points in time that
851 are part of the process of change and are still inside the discontinuous pattern before their
852 stabilisation and regarding it as a definite outcome, creates questions about the validity of
853 such results. The way funding for treatment evaluations is established, including a need
854 for fast results that demand proof of effectiveness and changed patients soon after the end

855 of treatment, leaves little room for deviation from outcome focused research designs.
856 However, there is a need to decide whether we wish to produce results that are fast or
857 that more adequately capture the complexities of the change process.

858

859 7. References

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ⁱ Metaphysics is the term applied when questioning issues related to the definition of reality that go beyond those that can be addressed by scientific methods (for example being, causation, categories of things that exist). Ontology is closely related to and can be considered as a branch of metaphysics (Blackburn, 2008:232, 260). Ontology is mostly concerned with what exists, etymologically deriving from the Greek word οντολογία whereby the ὄν refers to something which is/exists (authors' translation).

ⁱⁱ the phrase 'πάντα χωρεῖ καὶ οὐδὲν μένει' is attributed to Heraclitus translated into 'everything is moving and nothing stays the same', found in Plato's *Cratylus* (402a). (Kahn, 2013; Campbell, O'Rourke & Silverstein, 2010). Time and identity.)