



## Research article

## Individual differences in professional sport narrative experience during basketball players club mutation

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## ABSTRACT

Due to the growing competitive challenges, athletes' mutation between clubs has emerged an area of interest within career development. However, studies aimed at analysing this specific process of adaptation to clubs that lead to success or failure in such career mutations are seldom. We developed a comprehensive understanding of the psychological mutation processes to clubs using a narrative level of McAdams' model of personality. The qualitative method approach used in the Big Three narrative framework (McLean et al., 2019) and good life stories standards (McAdams, 1996) were applied to uncover the components of the narratives of twenty professional basketball players during mutation between clubs. The current study sort to test the links between these narrative components and athlete successful club to club mutation (CCM-successful). On average, the results showed that the participants experienced richer narratives as compared to general population  $t(17.08) = -1.48, p < .05$ . Narratives in the CCM-successful were also richer (Mean = 2.83, SD = .16) as compared to narratives of the CCM-unsuccessful (Mean = 1.63, SD, = .36). The overall club mutation success correlated positively with exploratory processing, meaning-making and agency narrative components. These results suggest that when athletes develop active attitudes seeking for solution and sharing their experience with others, they may build the conditions of adaptability that corresponds to a successful outcome for their mutation. The participants exhibited flexible and proactive behaviours which rendered possible the appropriation of the elements in the environment that favour a positive experience of mutation.

## 1. Introduction

In professional sports, the athletes' career is marked by club to club mutations (CCM). In basketball, the number of international transfers on a global scale rose 34 % between seasons 2010/2011 and 2018/2019 across all major leagues (CIES Observatory, 2019). Likewise, according to the Swiss-based International Centre for Sports Studies' Football Observatory, the proportion of foreign football (soccer) players, amongst the 31 European divisions surveyed, increased from 34.7 % in 2009 to 39.7 % in 2017 (Poli et al., 2018). These mutations are often presented as an achievement for the clubs and the players alike. Indeed, today's media headlines spread the words of these mutations with detail on the professional player regarding the money exchange, the performance outcomes expected and new perspectives on group cohesion for example (Jarosz et al., 2015). However, these stories mask the reality of the changes that are at stake during these mutations. Professional athletes that transited have to adapt to the new environment and face new challenges, such as club cultures, coaches' style, teammates behaviour,

family displacement, and geographical constraints. The price of this successful mutation is both in the immediate and long-term resulting in players' and club's improved performance (e.g., the duration of the contract is averagely three years) as well as further outcomes regarding the whole career of the athletes (long-term consequences e.g., adjusting effectively to post-career).

Thus, besides the media headlines, the achievement of successful mutations is an important concern and remains a challenge for clubs as well as players in terms of investment and career management. However, the understanding of the psychosocial attributes underlying these mutations and their successful character, and despite the salience of these mutations have been overlooked (Owiti et al., 2020; Vaeyens et al., 2008). Hence, the aim of this study was to provide an account of the psychological processes involved in CCM and their successful club to club mutation components (CCM-successful) by analysing the experience of professional basketball players. At this stage, we define mutation as changes from club to club that occurs in the professional players career and inserted in the mastery phase (Wylleman and Lavallee, 2004) and

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more seldom in the development phase for talented athletes. If professional phase in the career development (i.e., mastery phase) have been identified, no specific attention has been displayed towards the “micro-phases” inserted in this mastery phase and corresponding to CCM. The analysis should be thus inserted in this phase of development with a closer look at the footages that described the CCM-successful.

The study of these specific micro-phases including their effects in terms of success or failure imply the consideration of the dynamics of the relationship between the player and its environment that is the core change when a mutation occurs. Situated approaches of human activity i.e., “the four E approach” – (Embedded, Embodied, Extended, Enacted-Rowland, 2010) suggest that the relationship with the environment for a player is built by his/her activity (e.g., Hauw, 2018). It means that the players' new world of feelings, thoughts, emotions, actions, or relations during a mutation emerged from the types of connection that the players are able to enact. Characteristics of the environment (e.g., the coaches' personality and habits, teammates' openness, club facilities) and player's dispositions to interact with his/her environment are the two components that are at stake in this process.

One relevant example of this relationship is the concept of workplace flexibility that may be able to conceive with a worker's perspective in mind CCM and CCM-successful (Hill et al., 2008). The authors defined workplace flexibility as “the ability of workers to make choices influencing when, where, and for how long they engage in work related-tasks-p. 152”. Indeed, substantial studies have heralded as a necessity the importance of workplace flexibility for optimal outcomes in the individual, home, and family analysis (Jacob et al., 2008). Therefore, a good match between the players' psychological resources and the environment requirements is expected if a satisfactory outcome performance is to be achieved (Wanberg and Kammeyer-Muller, 2000).

Literature suggests that psychosocial resources that are at the core of the interaction with the environment and impact CCM-successful may lie in various constructs including personality dispositions, skills and experience and one way to consider them is to use the Identity Multilayer model of McAdams (1996). This model characterizes a person's identity through three levels: (i) dispositional trait constructs i.e., the Big Five (ii) personal actions constructs (PAC's) i.e., invokes skills such as personal strivings, motivations, goals, self-regulation, and (iii) narratives/life stories i.e., constructed from experience to give meaning to oneself (McAdams, 1996; McAdams and Olson, 2010). Specifically, the narrative level represents a suitable approach to understand how these psychosocial resources work for CCM because it is integrative, evolving and further interprets the reconstituted past, perceived present, and anticipated present (McAdams, 1996; McLean et al., 2019). Indeed, several authors have argued for the use of narrative in the study of life transitions (McAdams et al., 2006), athlete retirement (Carless and Douglas, 2009), career transitions (Ely and Ronkainen, 2019), doping transition (Hauw and Bilard, 2012), or associated changes in well-being (Adler and Hershfield, 2012). McAdams provided a model in which narratives have been identified as correlated with indicators of well-being at multiple levels, including happiness (Bauer et al., 2008), team cohesion (Collins and Durand-Bush, 2010), and adaptability during transitions (Ely and Ronkainen, 2019).

These findings indicate that a narrative approach can offer a wide and meaningful understanding of these outcomes and also facilitate the practical experience in capturing psychosocial components of CCM and CCM-successful. Indeed, McAdams (1996) has also presented in his integrative framework emphasis on the good life stories, meaning internally coherent, makes for a continuous plot line in which early events “cause” or logically leads to later events. At least six standards of good life story forms have been identified: (i) coherence-refers to the extent to which a given story makes sense on its own terms (ii) openness-an open story propels the person into the future holding open a number of different alternatives for future action and thought (iii) credibility-the good story should be accountable to the facts that can be known or found out (iv) differentiation-a good story is rich in

characterization, plot and theme, therefore, as the adult gathers new experiences, the life story becomes richer, deeper and more complex (v) reconciliation-within a good story, there are conflicting forces leading to tough issues and dynamic contradictions (vi) generative integration-a good story provides solutions that affirm harmony of the person living in a particular society at a particular point in history.

Even if McAdams model (1996) does provide a substantial contribution by identifying components of the narratives that included in situated way various psychological aspects we might consider for CCM-successful (i.e., coherence, openness, credibility, differentiation, reconciliation, and generative integration), a reframed version of this model has been recently provided within three factors (The Big Three Narrative framework) of life narratives: Motivational and Affective Themes (MAT), Autobiographical Reasoning (AR), and Structure (S) aspects (McLean et al., 2019) (See Figure 1 for The Big Three Narrative model representation).

The first factor is autobiographical reasoning (AR) which concerns mainly change in the self. The features that fall under this component hinge on narrated change in the narrator, primarily a self-reported change in one's understanding or interpretation of self or past events. Secondly, motivational and affective themes (MAT) capture goal-like orientations about broad based general life concerns and emotions. Finally, structure (S) can be thought as an architectural component of narrative, less focused on the personal evaluation or meaning of the event and more focused on the degree to which the story is elaborated and coherent, or “makes sense” (McLean et al., 2019). In trying to find general structures in the narratives that could be linked to positive and negative tones, we hypothesize a relationship between good life stories model (McAdams, 1996) and the Big Three Narrative framework (McLean et al., 2019).

When looking at the potential relationship between the good life story and the Big Three framework in which we believe relates to CCM-successful, three potential links could emerge: (i) coherence theme of the good life story could correspond to the structure dimension in Big Three framework (ii) differentiation and reconciliation could correspond to exploratory processing and meaning-making, and (iii) openness could correspond to agency. However, no studies have investigated the stories of successful mutation using the Big Three Narrative framework.

In summary, no studies have been conducted regarding the players' experience of mutations from club to club. However, these changes may constitute significant sporting life perturbations that would be relevant to understand in order to help players in the management of these inevitable events in their professional career. To do that, we focus on McAdams' integrative personality framework with specific emphasis on the narratives and make distinction in respect to successful and unsuccessful mutations. Therefore, the aim of this study was to provide an account of the psychological processes involved in CCM and CCM-successful by analysing the experience of professional basketball players and how they could link to the six elements of good life stories.

## 2. Method

### 2.1. Participants

This study involved a convenient sample of twenty professional basketball players (Male N = 17, Female N = 3, age range 20–36; Mean = 26.05, SD = 4.12). The names and addresses of all the athletes were obtained through the Swiss Basketball Federation. A total of 35 basketball players were e-mailed cover letters explaining the purpose of the study out of which 25 players responded positively. Five players could not be interviewed due to time and distance constraints. Elite basketball players were recruited since this population is believed to have encountered a number of club to club mutation during their career progression (CIES Observatory, 2019). In total, twelve players had undergone through European basketball academies in their respective countries (example; France, Swiss and Lithuania) and had performed at

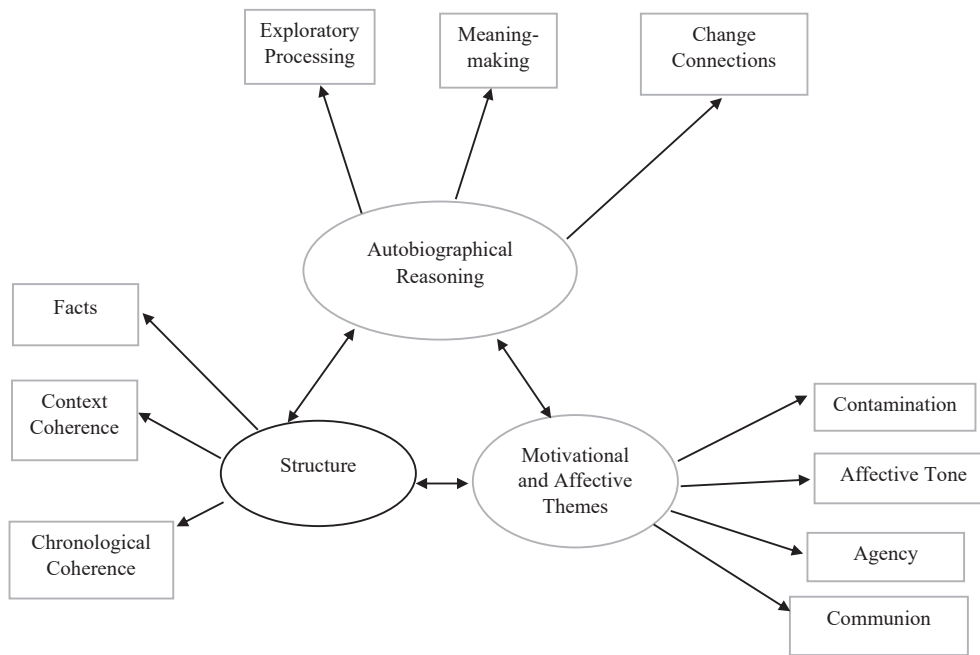


Figure 1. Visual representation of the big three functional model (re-created from McLean et al., 2019).

highest levels in their respective countries. The remaining eight participants went through their North American academies (e.g., USA & Canada) and had played in one of the highest leagues (National Basketball Association G League and the Women's National Basketball Association). All the North American players were currently recruited and playing in European basketball teams. The inclusion criteria were that the participant must have been currently playing at an international/professional level and must have gone through more than one club mutation. Additionally, the participants had played for (club range 3–10; Mean = 5.35, SD = 2.08) clubs and had been trained under (coaches' range 4–15; Mean = 8.65, SD = 2.92). Table 1 presents full descriptions of the participants.

2.2. Data collection

After obtaining institutional ethical approval (Project number: E\_SSP\_062021\_00001), we invited the participants to take part in semi-structured interviews. Signed consent forms were obtained from the participants. The interviews were conducted in English language and took place in a setting agreed by the participant allowing them to feel relaxed and comfortable. Since narratives involve self-authorship through telling of stories about memorable and significant events, making meaning of them, linking them together to form a larger life story, and revising them as new information and events arise. The researcher, therefore, developed an interview format based on timeline and this required measuring the athletes club mutation experience at one point and measuring the same person's experience at another point (Hauw and Bilard, 2012; Ryba et al., 2016). This facilitated keeping the semiotic trace of mutation experience (e.g., from the first club to the next). By opting for a timeline narrative interview, we were able to capture the processual nature of mutation process as they dynamically emerged over time. This advances our study design over other previous research, which have only applied the single time point and/or single prompts to capture narratives for example, only high and low points of our lives, self-defining moments, and turning points (Fivush et al., 2017). The face to face interview sessions were participant led in the sense that the athletes were invited to share personal experiences relevant to club mutation narratives.

The researcher asked initial questions allowing for participants to address the remark accordingly. The broad questions were based on four

areas during the mutation (e.g., How would you describe your relationship with the coach? How would you describe your relationship with teammates? How would you describe adapting to the coaching style? How would you describe being away from your family? Further probing questions were asked to gain more insights into the athletes' club mutation narratives. Finally, after each broad question, participants were requested to rate their experiences based on a Likert scale (from 3- easy, 2- average, and 1- difficult) if they thought that the mutation was either easy, average or difficult. Easy mutation and bad mutation in this context were defined as an outcome which involved either an absence or presence (respectively)

Table 1. Description of participants.

Participant	Gender	Age	Nationality	Highest play level	No of clubs	No of coaches
AW94IM	M	25	USA	NBA G L	8	11
SL87IM	M	32	Swiss/France	SBL/LNBF	7	10
MM93IF	F	26	USA	WNBA	4	4
CD94IF	F	25	USA	WNBA	7	6
MF99IF	F	20	Swiss	SBL	3	6
VG93IM	M	26	Swiss/France	SBL/LNBF	5	11
VP98IM	M	21	Swiss	SBL	3	10
SK83IM	M	36	Swiss	SBL	9	8
SC92IM	M	27	France	LNBF	3	6
LP93IM	M	26	Swiss/Lithuania	SBL	7	8
JW98IM	M	21	Swiss	SBL	3	10
JW93IM	M	26	USA	NBA G L	6	8
JH95IM	M	24	Canada/Swiss	NBLC	4	7
JP96IM	M	23	USA	NBA G L	3	7
GL91IM	M	28	Swiss	SBL	8	13
EU93IM	M	26	Swiss	SBL	3	4
BH97IM	M	22	USA/Canada	NBA G L	4	7
AH95IM	M	24	Canada/Swiss	NBA G L	6	10
AR88IM	M	31	Swiss	SBL	6	15
TD87IM	M	32	Swiss/France	SBL/LNBF	8	12

Note. SBL = Swiss Basketball League, NBA G L = National Basketball Association G League, LNBF = League National Basketball France, WNBA = Women's National Basketball Association, NBLC = National Basketball League of Canada.

of problems with coach, teammates, and being away from the family. Average mutation involved both presence and absence of problems with coach, teammates, and being away from the family.

All interviews were immediately transcribed at the end of the interview session. The transcripts length ranged from (length range 4, 798–12, 861, Mean = 7,567, SD = 978) words for the interviews duration that lasted (duration range 30–90, Mean = 56, SD = 11.56) minutes.

### 2.3. Narrative coding

During coding, we adhered to the recommendations of Syed and Nelson (2015) for establishing and maintaining reliability. A top-down approach using validated and theoretically based coding protocols was applied to find common themes in the narratives (Syed and Azmitia, 2010). Each participant narrative experience was coded by three independent coders using the functional model and coding system in (McLean et al., 2019). For each component, the three coders learned the specific coding scheme through reading and discussion of that coding manual (McLean et al., 2019). Then the three coders used a predetermined set of the narratives during the coding training phase. During this phase, the three coders discussed each narrative code in depth. After training, a previously unexamined subset of the narratives approximately 10–25 % was coded independently by each coder in order to compute a cross system reliability. Once reliability was established, all of the three coders scored the rest of the data set. Coders were trained on a sub-set of narratives, completed reliability on a different subset of narratives then coded the remaining narratives. Coders met to compare and resolve discrepancies or discuss difficult cases. There were two components (i.e., exploratory processing and change connections) out of ten which had discrepancies, and this was resolved through discussion that finally led to a higher intercoder reliability. We adopted a rating scale (quantitative approach) to code the components in order to link the narratives (qualitatively). Thus, by focusing on the narratives, we were mostly concerned with the situated culture nearest to the person. However, the scores allowed us to move away from the person while reducing our way out of the singularity (McAdams, 1996; McLean et al., 2019). After interviewing the twenty participants, the first author noted that no new themes were emerging, suggesting that a degree of saturation had been attained (Guest et al., 2006). Reliability was assessed by averaging the correlations between the three coders in addition to calculating the Interclass Correlation Coefficient (ICC) and both scores were significantly high.

To give insight as to how the coding task was carried out, the following excerpt from a participant's narrative about difficult encounters while being away from her family acts as an example.

*“Being here in Switzerland is like the toughest situation I have been through because of the time difference, which is like 7 hours behind USA time. So, like in the afternoon when I'm about to go for my practices, that's probably the time they're waking up and seriously being by myself in the house, the house is so gloomy, and on top, we have a lot of free time as well. In my previous team, I didn't have a lot of free time, but here, if I'm not in the gym for like 90 minutes, then I'm at my house taking a nap or watching Netflix like for 7 hours. So, I feel I'm really secluded, I can't hang out with my younger teammates, can't communicate with my family due to time difference. It's very tough, I'm sacrificing a lot because I want to further my career. I have to stay positive- participant- participant CD94IF”.*

Table 2 provides a detailed description of the coding scores. For the above example, exploratory processing scored 2 because the athlete minimally explored the meaning of past events including internal thoughts and feelings surrounding the event. A score of 2 was attributed for meaning making because the narrative described some sort of growth “staying positive” but the specifics of the change was not clear. Of the change connections, the participant scored 0 in both “reveal” and “induce components” respectively, since no change in the self, and finally no new aspect of self was featured in the experience. Each component of

Table 2. Narrative components coding (adapted from McLean et al., 2019).

Dimension	Definition	Range	Reliability/ ICC
Exploratory processing	Defined as the extent to which a person openly analyses and explores the meaning of the past events in order to understand their internal impact and potential to change the self.	1–4	.807
Meaning-making	Is the degree to which the participants narrate self-knowledge derived from reflecting on the past experiences.	0–4	.914
Change connections	Involved both <i>induce</i> -a connection in which a change in the self was caused by an event. And <i>reveal</i> which involved a connection when an experience brings to light a previously unknown aspect of self.	0–1	.861
Facts	Facts were described as statements that could be objectively verified.	0–3	.806
Contextual coherence	Was described as a dimension that places the event in time and location.	0–3	.812
Chronological coherence	Captured the degree to which the narrative was temporarily organized.	0–3	.850
Affective tone	Was described as a dimension that captures the overall emotional tone of the narrative.	1–5	.867
Contamination	Defined as a narrative which begins in a positive state and ends in a negative state	3-2, 2-1, 3-1	.775
Agency	Are narratives concerned with autonomy of the protagonist	0–4	.850
Communion	Defined as narratives concerned with connection, love, and friendship.	0–4	.935

structure (e.g., facts, context, and chronology) scored 3 since the event indicated time and location, was temporarily organized and the narrative showed clarity. Affective tone scored 2 due to the negativity of the experience. There was a presence of contamination in the narrative moving from 3 to 1 as the athlete seemed to have been in a positive state initially but finally ends up in a negative state. In terms of agency, a score of 4 was assigned because the protagonist was able to affect their own lives, initiate changes on their own while communion scored 0 since the athlete felt completely disconnected. The overall participants Mean/SD score relating to the ten narrative dimensions are presented in Table 7 under descriptive statistics section.

### 2.4. Data analysis

Statistical analysis was performed using IBM SPSS Statistical Software (v. 25). Data are reported as mean  $\pm$  standard deviation. A Multivariate Analysis of Variance (MANOVA) was used to compare the narrative component results from each participant. Additionally, an Exploratory Factor Analysis (EFA) was run to determine the communalities between

the narrative components. In order to draw a general conclusion from specific observation and the general population, an *independent t-test* was carried out against results from the current study and McLean et al. (2019) study (sample 1 memory 3). In order to identify how the participants performed during each club mutation, a “club mutation score-see Table 4” was computed by aggregating the easy, average, and difficult scores which were then linked to the narrative components. A further bivariate correlation analysis using Spearman's correlation coefficient was run to determine associations between the narrative components and level of adaptation in the club mutations. The level of significance was set at  $p < .05$ .

### 3. Results

The results are provided in two parts: (i) descriptive statistics of our sample and comparison with the general population, (ii) identification of narrative components involved in CCM and CCM-successful. A Shapiro-Wilk's test, visual inspection of the histogram and the Q-Q plots showed that not all data were normally distributed. Further kurtosis and skewness results confirmed that the data were not normally distributed. Levene's test also confirmed that some data had violated the homogeneity of variance assumption.

(i) Descriptive statistics of our sample and comparison with the general population

On average, results presented in Table 3 showed that participants in the current study experienced richer narratives in most dimensions as compared to McLean study. This difference was significant  $t(17.08) = -1.48, p < .05$  and represented a medium effect size  $r = .33$ . In particular, exploratory processing, meaning-making, agency, and communion were highly developed in our sample. This excerpt illustrates these dimensions in our sample data:

*“Luckily, I did not break, and this is not just about my career step but life in general. I'm really an open-minded person full of curiosity and this allows me to be flexible in different situations. Yes, at times it can be hard to adapt quick enough, you know, these adaptations don't come overnight, they may take time, but you have to sacrifice your time, be mentally prepared, try to join all the pieces together, and be autonomous. I'd rather not waste my energy trying to be rigid to change. Do you know how many times I have had to do things I didn't want to in life? No one is going to baby sit you, you have to face the transition challenges and take it to the next level- participant JP96IM”*

The athlete presents a rich narrative which openly analyses and explores past events while gaining insights for behaviour change. Additionally, the athlete reports high autonomy and connection concerns by

**Table 3.** Comparisons between players' general scores with McLean et al. (2019) sample scores (Mean/SD).

	Current study	McLean	T-test	Cohen d
Exploratory Processing	2.86 (.87)	1.69 (.84)	$t = 6.11 p < .000$	1.37
Meaning Making	2.18 (.88)	.65 (1.13)	$t = 5.99 p < .000$	1.51
Change Connection	.33 (.63)	.59 (.62)	$t = -1.84 p < .066$	-0.42
Facts	2.49 (.75)	2.01 (.80)	$t = 2.64 p < .008$	0.62
Contextual Coherence	2.51 (.71)	2.50 (.79)	$t = .50 p > .956$	0.01
Chrono Coherence	2.35 (.93)	2.76 (.53)	$t = -3.29 p < .001$	-0.54
Affective Tone	3.75 (.97)	2.41 (.77)	$t = 7.57 p < .000$	1.53
Contamination	31 (.60)	.32 (.47)	$t = -.09 p > .926$	-0.02
Agency	2.20 (1.48)	1.07 (1.19)	$t = 4.13 p < .000$	0.84
Communion	3.11 (.92)	1.51 (1.24)	$t = 5.71 p < .000$	1.47

Note. Chrono coherence = chronological coherence.

initiating own changes and some degree of control over the course of his experience.

(ii) Identification of narrative components involved in CCM and CCM-successful.

The overall club mutation experiences are introduced in Table 4. The results showed a general high level of assessment regarding the success of the mutation (Mean = 2.41, SD = .63). There were differences between the players on their general profile of their assessment story. Some participants presented high scores in their stories of club mutations (e.g., AW94IM) while others remained at mid or low level (e.g., JW93IM). In addition, various patterns in stories of mutations emerged. Some players assessed their mutations with a global stable score (high and low) (e.g., TD87IM, MF99IF respectively) while others identified incidents in their mutation (e.g., GL91M). In face of this diversity, we decided to split the group into two using the overall mean of the mutation success (Mean = 2.41). Therefore, any score above or below the mean was considered as either CCM-successful or CCM-unsuccessful respectively. The results showed that narratives in the CCM-successful were richer (Mean = 2.83, SD = .16) as compared to narratives in the CCM-unsuccessful (Mean = 1.63, SD = .36 (see Table 5).

In comparing results from each participant, Pillai's trace reported significant difference between participants  $V = .32, F(4, 54) = 2.56, p < .05$ . Separate ANOVA results also revealed significant differences on all narrative components except on contamination  $F(19, 77) = 1.21, p > .05$ .

A Principal Component Analysis (PCA) was conducted on the 10 items with orthogonal rotation (varimax). The Kaiser-Meyer-Olkin (KMO) measure verified the sampling adequacy for the analysis, KMO = .79, and all the KMO values for individual items were  $> .70$  which is well above the acceptable limit of .5 (Field, 2013). A Bartlett's test of sphericity  $\chi^2(45) = 441.854, p < .001$ , indicated that correlations between items were sufficiently large for PCA. An initial analysis was run to obtain eigenvalues for each component in the data. There were 3 components which had eigenvalues over Kaiser's criterion of 1 and in combination explained 42.82 % of the variance. However, after component rotation, the first component only explained 27.55 % of the variance. Table 6 shows the rotated component matrix.

In order to examine the correlation between the narrative components and the level of adaptation in club mutations, results are presented in Table 7.

Results showed the level of adaptation in club mutation correlated positively with exploratory processing, meaning making and facts narrative components including contextual coherence. A further analysis revealed that both contamination and communion narrative components were negatively related with the level of adaptation in club mutation.

Having identified the narrative components which correlated with the level of adaptation in club mutations (for example: exploratory processing, meaning-making, and facts). We further traced back these narrative components from the raw data (scores from easy, average, and difficult club mutation) in order to gain more insight by comparing the scores from both the qualitative and quantitative results. An example is this case was an extreme score within the easy mutation group (Mean = 3.00, SD .00) when linked back to the narrative component indicated that the athlete's narrative was very rich in exploratory processing, meaning making, and contained facts as shown in this example:

*“Me and the coach probably had many fights than any other coach that I ever had but then again, I had full respect for her, she was my first female coach I have had in my whole career. We butted heads on different things more so because it was the first time that I had to adapt to “No you are not going to do things your own way just because you are the best player but you are still going to do things my way and act as I ask you to”. I first took a step back. I think the biggest thing was trying to be open-minded, so, whether it was something big or small, I would ask myself why she wants*

**Table 4.** Participant scores during each club mutation.

Participant	M1	M2	M3	M4	M5	M6	M7	M8	M9	Mean	SD
AW94IM	3	3	3	3	3	3	3	3		3.00	.00
SL87IM	1	2	2	3	2	2	1			1.86	.69
MM93IF	2	1	2	2						1.75	.50
CD94IF	1	1	1	1	2	2	2			1.29	.49
MF99IF	1	1	1							1.00	.00
VG93IM	2	3	2	3	3					2.60	.55
VP98IM	3	3	3							3.00	.00
SK83IM	3	2	3	3	2	3	3	3	3	2.78	.44
SC92IM	2	2	2							2.00	.00
LP93IM	2	3	3	3	3	2	3			2.71	.49
JW98IM	3	3	3							3.00	.00
JW93IM	2	1	2	2	1	2				1.67	.52
JH95IM	3	2	3							2.67	.58
JP96IM	2	3	3							2.67	.58
GL91IM	2	2	1	2	3	2	2	1		1.88	.64
EU93IM	3	3	3							3.00	.00
BH97IM	3	3	3	2						2.75	.50
AH95IM	2	3	3	2	3	3				2.67	.52
AR88IM	3	3	3	3	3	3				3.00	.00
TD87IM	3	3	3	2	3	3	3	3		2.88	.35

Note. M = Mutation, Scores in Easy mutation = 3 Average mutation = 2 Difficult mutation = 1.

**Table 5.** Participant scores within the CCM-successful versus CCM-unsuccessful group.

Participant	CCM-successful (>2.41)	Mean/SD	CCM-unsuccessful (<2.41)	Mean/SD
AW94IM	3.00	.00		
SL87IM			1.86	.69
MM93IF			1.75	.50
CD94IF			1.29	.49
MF99IF			1.00	.00
VG93IM	2.60	.55		
VP98IM	3.00	.00		
SK83IM	2.78	.44		
SC92IM			2.00	.00
LP93IM	2.71	.49		
JW98IM	3.00	.00		
JW93IM			1.67	.52
JH95IM	2.67	.58		
JP96IM2	2.67	.58		
GL91IM			1.88	.64
EU93IM	3.00	.00		
BH97IM	2.75	.50		
AH95IM	2.67	.52		
AR88IM	3.00	.00		
TD87IM	2.88	.35		
<b>Overall Mean/SD</b>	<b>2.83</b>	<b>0.16</b>	<b>1.63</b>	<b>.36</b>

Note. CCM-successful (N = 14) group had scores equal to or greater than 2.41. CCM-unsuccessful (N = 6) group had scores equal to or less than 2.41.

*me to do this, obviously, she wants me and the team to succeed, her job literally is in the hands of these 18 to 23 players so obviously there has to be some reason why she is asking me to do this. So, it was just being open and asking myself “why?” and then this helped me to adapt to it- participant AW94IM”.*

In this case, the athlete can be seen to be grappling with the complexity of club mutation challenge, exploring its meaning, and

**Table 6.** Exploratory factor loadings (rotated component matrix).

Component			
	1	2	3
Contextual coherence	.872		
Chronological coherence	.814		
Facts	.799		
Affective tone		.826	
Contamination		-.819	
Agency		.722	
Communion	.425	.633	
Meaning making			.758
Change connection			.747
Exploratory processing	.458		.651

actively interpreting its transformative impact. The athlete then connects the turning point to some aspect of or understanding of the self by associating it with being open-minded. The narrative is highly organized, structurally sound and objective. Similar observation and relations can be linked to good life stories with the athlete showing the extent to which the club mutation challenge makes sense. There is also characterization of the successful mutation where compelling plots with the coach builds up tension to a climax and after a resolution is achieved.

In reporting on the extreme low scores within difficult mutation (Mean = 1.29, SD .49) and linking it back to the contamination and communion dimension, the following raw data example gives an insight of the mutation challenges experienced by the athlete.

*“Adapting to the new coaching style was not easy. I felt like they were always asking for a lot more, more than just effort. It wasn't also just your physical but also at school your grades had to be good, what else? His main thing was grades, not even grades, he was just horrible (the coach). Culturally he was like different. I was just thinking that he didn't really want to work with me at all. I felt like he was against me honestly. He wasn't flexible with my schedule. And that's why at some point it was too much, and I had to quit the team- participant CD94IF”.*

**Table 7.** Descriptive statistics and Bivariate Correlations Between Level of Adaptation in Club Mutations and Narrative Dimensions.

	Mean	SD	1	2	3	4	5	6	7	8	9	10
1. Club Mutation	2.41	.63										
2. Exploratory Processing	2.90	.86	.738**									
3. Meaning-Making	2.36	.75	.559**	.382								
4. Change Connection	.33	.63	.318*	.456*	.786**							
5. Facts	2.49	.75	.544**	.160	.339*	.448*						
6. Contextual Coherence	2.51	.71	.373**	.238	.573**	.467**	.059					
7. Chronological Coherence	2.35	.93	.435*	-.364	.564**	.518**	-.149	.593**				
8. Contamination	.31	.60	-.549**	-.127	.403**	.262**	-.132	.556**	.719**			
9. Affective Tone	3.75	.97	.012	-.248*	-.054	-.059	.086	.060	-.036	-.160		
10. Agency	2.20	1.48	.131	.048	.445**	.404**	-.055	.470**	.389**	.382**	.335**	
11. Communion	3.11	.92	-.611**	-.029	.488**	.497**	.113	.529**	.427**	.569**	.272**	.602**

Note.

\*\* Correlation is significant at the 0.01 level (2-tailed).

\* Correlation is significant at the 0.05 level (2-tailed).

As concerns the context above, the communion component captures concerns of interpersonal connection, expressing desires for love, friendship, and community which the athlete is clearly lacking. Additionally, contamination component which involves a sequence of moving from good to bad led to negative transformation hence the athlete quitting the team.

*“I went through the hardest summer holidays training myself correctly, so, when I joined the club, in the beginning I wasn't playing then later I would sometimes play but it wasn't regular. Unfortunately, I didn't have the coach's confidence, and these are things which do happen. That was difficult because I had signed for two years. So, finding myself on the bench with no play time was negative and hard to accept. I must admit that it was a lot of frustration, you arrive at the team and you have a lot of self-confidence, you tell yourself that it's going to be your season and that you're going to have fun, unfortunately, it's the opposite. It's not easy to manage those type of situations- participant GL911M”.*

The above narrative is also an example of a good story but with bad episodes. The club mutation is very interesting and perhaps indicative of the athletes rapidly involving reinterpretation of this event and its meaning for the overall story. The story conveys a moderately negative emotional tone with a mixture of conflicting motivations and feelings suggesting rich narrative. In terms of the good life story, it builds compelling plots leading to tension, unfortunately, reconciliation between the conflicting forces is not achieved.

A key function of mutation is being able to adapt both at an individual and environmental level. The athlete should be able to openly analyse and explore internal thoughts and feelings to help with behaviour change (i.e., exploratory processing). In the same vein, the club should offer a healthy environment to facilitate CCM-successful. Therefore, since narratives constitute experiences and not competent skills, we looked at the raw data in search of the athlete's experiences as shown in the following examples.

*“Soon as I arrived, they made a big effort to integrate me into the club. Anytime I needed help, they were always ready to help. The club management would call to find out if all was going on well. All these helped me a lot because finally it was not like I was alone- participant GL911M”*

*“The structure was very poor, it was tough in that there was no staff, no one to talk to or approach. I remember we had to pay for taping bands for the wrist and ankles. The bus trips were very long for away games since we had to make back and forth trips. This was tough on our recoveries- participant JP961M”*

*“You have to expect those tough moments, those challenging times when you have to make tough decisions. You must be ready for change and this*

*comes with how ready your mind is in terms of being flexible to change- participant MM931F”*

#### 4. Discussion

The aim of this study was to provide an account of the psychological processes involved in CCM and CCM-successful by analysing the experience of professional basketball players and how they could link to elements of good life stories. The current study is the first to document athletes' experiences using the Big Three Narrative framework and was grounded on the description of the nature of narrative regarding athlete's course of changes from club to club. Overall, the participants experienced richer narratives  $t(17.08) = -1.48, p < .05$  than the general population in McLean et al. (2019) study. In comparing results from each participant with corresponding narrative component, we reported significant difference  $V = .32, F(4, 54) = 2.56, p < .05$ . Separate outcome tests also revealed significant differences on all narrative components except on contamination  $F(19, 77) = 1.21, p > .05$ . On average, CCM-successful presented (Mean = 2.83, SD = .16) while CCM-unsuccessful reported low score (Mean = 1.63, SD = .36). Intercorrelations between level of adaptation in club mutation and the narrative components also revealed positive associations with exploratory processing (54 %), meaning-making (31 %), and facts (30 %). However, contamination, and communion revealed negative associations (30 % and 37 % respectively) with the level of adaptation in club mutation.

Our results show that these club mutations impacted athletes' in terms of their experiences forming narratives. The participants were able to be discriminated by the narratives and the “quality” of life stories they told. Additionally, the individual differences on how the stories about one's important experiences were told reflected on both the CCM-successful and its predictability. Thus, there are several potential reasons for this result, first, people make meaning of their lives through narratives and it is expected that each person employs their characteristic strategies and procedures for meaning making (McAdams, 2006; McAdams et al., 2006). Second, each participant draws from experiences of their own life, a pool of autobiographical memories and images which they structure to fit their own meanings (Tomkins, 1987).

In examining an array of results, we found that participants in the current study experienced richer narratives as compared to the general population in McLean et al. (2019) study: exploratory processing (Mean = 2.86, SD = .87 versus Mean = 1.69, SD = .84) and meaning-making (Mean = 2.18, SD = .88 versus Mean = .65, SD = 1.13) respectively. This finding is not surprising since sports environment involve dynamic interactions between teammates, coach, and staff in addition to perceived mutational challenges, barriers, resources, and high-stake performance outcomes (Diehl et al., 2019; Poczwadowski et al.,

2014). First, athletes in a sporting environment must therefore create insights from their experiences while exploring meaning and actively interpreting their transformative impacts during mutations. Second, the current study involved elite athletes whom had played at the highest levels unlike the general population. They had been exposed to and had the opportunity to interact with key tasks and environmental constraints that promote exploratory behaviours. Indeed, elite sports can provide in the best circumstances many and high attractive affordances that leads to adaptive behaviours. For example, elite team organize presenting the new players to the public and press. There are several processes within the teammates organized team buildings. Considering that affordances are opportunities for action presented in our socio-cultural practices and are related to an individual's ability to use available information to regulate and organise adaptable behaviours (Rietveld and Kiverstein, 2014). Therefore, differences between CCM-successful and the CCM-unsuccessful might be explained by these types and quality of affordances provided by the clubs.

The current study found an interpretable association in which club mutation narratives were positively correlated with exploratory processing. This association suggests that when athletes engage in exploratory processing, they explicitly focus in an effort to explore, reflect on, or analyse a difficult experience with an openness to learning from it and incorporating a sense of change into the good life story. It is believed that exploring difficult experiences would mediate between those reported challenges and mutation. In other words, athletes who described themselves as finding mutations easy in their experiences told more exploratory stories. In fact, McLean et al. (2007) and Pals (2006) have both independently shown that people who encounter difficult experiences but narrate them in a distancing manner rather than exploratory manner limit their personal development. This finding lends further support in the field of organizational behaviour where there is a notion that career transition challenges activate people to think about their career through initiating deliberate thought processes (Lee and Mitchell, 1994; Seibert et al., 2013). This in turn can lead to changes in behaviour thereby impacting on one's career path.

Our results showed that successful athletes' possess motivations for their adaptive behaviours during CCM (e.g., flexibility and self-efficacy). The participants narrated their mutation challenges with openness, coherence, and credibility, all of which are ingredients of a good life story. Self-efficacy in this context showed the athletes judgement of possessing the desired skills and abilities for CCM-successful. Moreover, the participants exhibited flexible behaviours both at individual and organizational level further reflecting various levels of athlete-environment interactions (Bronfenbrenner and Ceci, 1994). These results showed how important is the role of an athlete's environment in facilitating CCM-successful. Additionally, the current finding corroborates previous studies within organizational socialization which argued that, in the face of career transitions, it is not surprising that flexibility is widely acknowledged as a key competency for today's employee (Chan and Schmitt, 2000; Griffin and Hesketh, 2003; Hill et al., 2008). Following Tharenou and Kulik (2020), it is expected that within the club, a skilled "transitioner" is presented as able to align to the clubs' activities, socialization process and overall experience of the workplace. This finding indicate that sport organizations need to provide favourable environments to help athletes be well prepared for mutation challenges.

Interestingly, we found a negative association between the level of adaptation in club mutation and contamination and this may be related to athlete's inability to find benefit in negative events. This finding is hardly surprising, indeed, when a disruptive event such as a mutation challenge happens, athletes may be motivated to resolve the negativity or disruption by narrating the experience as provoking insight. The current finding suggests that, an attempt to minimize negative emotions and avoiding thinking about them entirely may lead to viewing CCM as challenging. However, it becomes clear that, those athletes who find mutations being easy are able to engage in negative emotions and embrace the challenge leading to positive association between

contamination and level of adaptation in club mutations. In support of our finding, early results also indicate that people report more meaning-making seeking goals when talking about negative events than positive events (King et al., 2000; King and Raspin, 2004; McLean, 2005; McLean and Thorne, 2003; McLean and Pratt, 2006; Pals and McAdams, 2004).

Our results showed that the fact narrative component was positively associated with the level of adaptation in club mutation. In explaining this finding, one important measure of success in drawing meaning from good life story is the structure of the personal narratives we construct about these events (Linde, 1993; Sparkes and Smith, 1999). Various studies have argued that factual narratives are associated with better memory, deeper understanding of self, more effective communication, and stronger identity (Fivush and Nelson, 2004; Fivush, 2008). Indeed, an athlete who is able to narrate a difficult club mutation experience with a clear recall may lead to that event becoming an important self-defining memory. This memory of a strengthened self is considered an important part of the narrative identity that enhances resiliency as new club mutation challenges arise (Singer and Salovey, 1993; Singer et al., 2013).

Another potentially fruitful area which could explain the athletes CCM-successful can be borrowed from a clubs' proactive approach. That is, people are not always passive recipients of environmental constraints on their behaviour, however, they can intentionally and directly exchange their current circumstances (Crant, 2000). Therefore, proactive athletes (CCM-successful) will always identify opportunities (affordances) which can be through exploratory processing and meaning-making, agentic and act on them while persevering until meaningful change occurs. On the other hand, less proactive individuals (CCM-unsuccessful) are passive and reactive, preferring to adapt to circumstances rather than change them. Taken together, athletes who possess a proactive personality become responsible for their career development, constantly adding new skills and taking actions in advance of potentially stressful events as reported within our participants (Gibson, 1979; Hristovski et al., 2006; Seifert et al., 2014; Withagen et al., 2012).

It has been argued that the potential to perform successfully in a job can best be predicted by past performance in conditions that are similar to the job as possible (Chan and Schmitt, 2000; Pulakos et al., 2000). This can best be supported by the fact that life stories are internalized and evolving narrative of the self that incorporates the reconstituted past, perceived present, and anticipated future (McAdams, 1996). Thus, adapting to novel situations or dynamic and changing environments during club mutation requires the athlete to pull resources previously applied in similar circumstances. The athletes can explore the meaning of the previous challenging mutation in order to understand their impacts and potential to CCM-successful. Practically, if past CCM-successful experiences can predict future CCM-successful experiences, then teams and clubs need to provide opportunities that challenge athletes to cope with the changes (i.e., in terms of athlete-environment). Therefore, athletes have to recall past performance and simultaneously anticipate future needs as concerns club mutation if they were to achieve CCM-successful.

We examined the agency component which is concerned with the autonomy and the motivation to impact and influence others or one's life circumstances. The participants in our study reported higher agency scores (Mean = 2.20, SD = 1.48) as compared to McLean et al. (2019) study (Mean = 1.07, SD = 1.19). However, the agency component reported no correlation with the level of adaptation in club mutation. These results could be analysed by considering that agency component is already embedded within the sporting domain unlike the general population. Having goals and motives (e.g., agentic behaviour) has consistently been shown to enhance performance in sports (e.g., enhancing motivation and self-confidence) (Burton et al., 2010; Gould et al., 2012; Kristiansen et al., 2012).

Our results showed that communion component was negatively related to the level of adaptation in club mutation. Indeed, it appears that the balance between athletes' level of adaptation and compliance (communion) (Lilgendahl and McAdams, 2011) was missing. Communion component demonstrates how athletes enact their inclusion in the



team when moving between clubs. In addition, because CCM-successful is partly composed by well-being and already embedded within athletes, this result is not completely surprising knowing that higher level of communion is associated with higher well-being (Adler et al., 2008; Adler and Hershfield, 2012). To explain our point, we will draw from the self-determination theory which states that human beings have three basic needs to fuel intrinsic motivations: autonomy, competence, and relatedness. In fact, cross cultural research has shown that need satisfaction is necessary for all people's healthy development, engagement, motivation, and well-being (Gagné, 2014). It can therefore be argued that individuals high in communion, show motivations for love, intimacy, and belonging leading to social adaptability easiness.

#### 4.1. Limitations and future research

Thus far, after showing that storytelling and inspired McAdams' approach, theory and method are relevant to uncover and examine what is at stake during mutation between clubs, several limitations should be acknowledged as well as highlighting some questions that remain unresolved which could define directions for future research on CCM and CCM-successful narratives.

The first limitation involved interpreting difficult experiences which (e.g., bad experiences with coach and teammates) vary in several ways within each individual (subjective) and may profoundly affect narration of club mutation concerns. Thus, it could be important for future research to examine how varying difficult experiences and their severity affect individual narrative identity. A second limitation is that although our hypotheses reflects theoretically driven ideas about cause and effect relations, the correlational design did not allow for analyses that would support conclusive statements regarding causality. Thus, future research on adaptability narrative should test the causal impact, ideally through studies that closely examine the connection between the different components and relevant outcomes. Additionally, a co-determination of the relationships between the narrative components could be studied through interactional analysis. A third limitation involved comparing our results with those of McLean et al. (2019) for generalizability. However, we admit that their results did not present a standard set for comparison. Further limitation along this line was due to many studies coding narratives in different ways. As such, comparison across studies is challenging because it is empirically difficult to establish whether certain narrative coding components relate to one another (e.g., exploratory processing, positive self-event connections, and positive emotions) or are measuring the same theoretical construct.

We acknowledge that conducting research within the narrative approach is somewhat hampered by the fact that it requires large samples to collect quantitatively relevant data. The fact that our study had aspects of gender imbalance and that most of the participants were mainly from the same region raises generalisability issues. Therefore, it remains of an interest as to whether studies with bigger and more representative samples would produce robust results cross-culturally. A related limitation concerns the quantitative analysis results which resulted in small effect sizes. Therefore, future studies could explore the Big Three Narrative framework with large samples in order to identify if stronger results could be achieved. Another limitation concerned the conversion of the narratives into numbers since it is not easy to translate human experiences and feelings into scores. However, our aim was to uncover at what level of narratives the relation exists while ensuring that the existing correlations were not artificial. Lastly, although narrative identity has been described as a distinct level of personality, little empirical research has explicitly examined connections between traits and narratives (Bauer et al., 2005; McAdams et al., 2004). It would be interesting for future studies to test how dispositional traits are linked to CCM and CCM-successful narratives and personal action constructs (PAC) such as skills in coping, resiliency, and goal setting.

#### 4.2. Practical implications

While acknowledging the limitations of this study, a few practical implications can be cautiously formulated:

1. The current results present valuable insight into the type of narratives which might enable athletes overcome challenges during club mutation. Thus, individuals working with the athletes (i.e., coaches and sports psychologists) can stimulate the building of a good story by regularly asking athletes to narrate their club mutations and regulate with them the components that are not well linked with good stories.
2. The ability of players to cope with club mutation challenges and evaluate weaknesses through good life stories appeared to be particularly important for progression. Therefore, clubs and academies (Talent Identification & Development- TID Academies) could assist players in developing repertoire of life story narratives, pertinent to the challenges during club mutations.
3. Clubs may apply the current findings in maintaining and if needed develop new resources that could efficiently assist athletes to successfully address the difficulties encountered during club mutation.
4. Educational programs focused on building good life stories should be entrenched within the athletes' environment either through formal and/or informal ways.
5. It is important that athletes' immediate environment is carefully managed. Therefore, the clubs should provide affordances for building narratives associated with CCM-successful.

#### Declarations

##### Author contribution statement

Samuel Owiti: Conceived and designed the experiments; Performed the experiments; Analysed and interpreted the data; Contributed reagents, materials, analysis tools or data; Wrote the paper.

Thomas Bersier: Analyzed and interpreted the data.

Denis Hauw: Conceived and designed the experiments; Analysed and interpreted the data; Wrote the paper.

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##### Data availability statement

Data will be made available on request.

##### Declaration of interests statement

The authors declare no conflict of interest.

##### Additional information

No additional information is available for this paper.

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