Intrinsic Motivation and the Flow Mental State in Street Runners[1]

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Resumo: Participaram do estudo qualitativo, dez praticantes de corrida de rua. A metodologia utilizada foi a análise de conteúdo. A maioria dos praticantes iniciou a atividade extrinsecamente motivada, mas a motivação intrínseca mostrou-se determinante na permanência por muitos anos. Foram identificadas relações entre os temas levantados na análise e os elementos que caracterizam o estado mental *flow*. Esses elementos podem ser importantes direcionadores na estruturação de atividades físicas, mantendo o indivíduo intrinsecamente motivado, implicando em maior assiduidade, empenho, tempo de permanência e satisfação.

Palavras-chave: Psicologia. Esportes. Corrida. Motivação. Estado mental *flow*.

1 INTRODUCTION

Running is currently a widely practiced sports modality. We usually see people running in streets, squares, parks, and avenues. Street running competitions have become popular events and have shown a quick growth in quantity and quality. Elite athletes participate in some competitions and become attractions, yet they represent a small number in comparison to the multitude of amateur runners, who see street running as a healthy form of leisure, social integration, and personal manifestation through sports.

Human behavior is quite complex, but motivation theories may help us understand it. A person can be extrinsically or intrinsically motivated to be involved with any activity. When the motivation is extrinsic, the activity is only a means to reaching an outer goal, such as money or status, and such type of motivation generally results in a higher tension and pressure, as well as higher levels of anxiety and stress. When the motivation is intrinsic, people do not focus on rewards; sure they may come, but as a result of involvement and commitment. This type of motivation is generally associated to more stable and durable endeavors. It may also lead people to experience a different mental state called flow, in which the full involvement with the activity and the current moment results in a unique sensation of pleasure and satisfaction and a great personal significance. Such

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types of experiences may help people effectively engage in the practice of some physical or sports activity.

This study of this article sought to identify, in street running practitioners, the reasons underlying the choice of this activity as a sports modality or a leisure practice; the motivational trend they present (intrinsic or extrinsic); the feelings and thoughts that are noticed during the practice, and similarities with the description of Csikszentmihalyi's flow elements.

2 STREET RACES

In Brazil, the street race is a segment of athletics and the CBAt (Brazilian Confederation of Athletics) is the association that regulates, organizes, and coordinates it. Elite athletes (who reach minimum established time indexes and formally engage in athletics) participate in competitions along with thousands of amateur runners, who urn to maintain certain levels of physical aptitude and for leisure (CBAt, 2007). In most street races that take place in Brazil, the course is 10km long, yet there are traditional competitions with longer courses, such as 15km-long races, half marathons (21.097km), and marathons (42.195km). Some of them also have shorter courses or walking courses, thus allowing runners' relatives to take part in the event. Generally, both men and women participate. The minimum allowed age is usually 16 years, with parental authorization, and there are events in which physically disabled people can participate.

3 MOTIVATION IN SPORTS AND PHYSICAL ACTIVITIES

People may practice a sports modality or physical activity for several reasons. According to WEINBERG and GOULD (2001, p. 79), "motivation is the key-variable both in learning and performance in sports and exercise contexts". Permanence, intensity of dedication, and results reached by the individual are influenced by their motivation, regardless of the fact they are involved with a high-performance sport, although other facts may also affect the performance, such as the level of anxiety, stress, physical fitness, health, etc.

Although people may be committed with an activity for various reasons, there are cases in which they become involved with activities that keep them interested, feeling motivated to repeat more often. The intrinsic motivation theory is originated to explain the behavior of people who spent a long time in determinate activities without any evident

external reward. Rewards in this case are inherent to the activity, and are connected to the positive feelings that are experienced. On the other hand, if the task is performed with the expectation of external rewards, the individual is extrinsically motivated. The relevance of this concept is related to the fact the extrinsic motivation tends to deteriorate once the need is met or the extrinsic target is reached; intrinsic motivation tends to be more constant (MASSARELLA; WINTERSTEIN, 2005, p. 2).

Vallerand (2001) has proposed a hierarchic model of intrinsic motivation, extrinsic motivation, and amotivation (which is the relative absence of motivation). He argues that people are not exclusively intrinsically or extrinsically motivated, nor are they amotivated; they normally present all three types of motivation in different levels. Motivation must be considered in the situational (the moment), contextual (the surroundings), and global level (the usually presented behavior).

According to Csikszentmihalyi (1999), whenever we are concentrated in a task, we have one intention and establish a goal. The time we dedicate to this goal and the intensity with which we maintain it depend upon our motivation. People are seen to feel better whenever they are intrinsically motivated when they act, yet they are seen to feel better when they are intrinsically motivated than when they are amotivated, not having anything better to do.

A solid set of goals helps us develop a cohesive self and is essential to our self-esteem. The feelings we have regarding ourselves and the happiness we experience for being alive depend on how our minds filter and interprets the experiences. Our happiness depends more on our inner harmony than the control we have upon outer events (CSIKSZENTMIHALYI, 1992).

4 THE FLOW THEORY

The Flow theory was based on studies carried out by the American psychologist Mihaly Csikszentmihalyi. According to Weinberg and Gould (2001, p. 158), it represented an innovation in the studies on intrinsic motivation. Research involving this theory has evidenced a great evolution in countries such as the United States, Canada, Germany, Italy, Japan, and Australia however there are relatively few studies in Brazil. The concept of flow is derived from activities that Csikszentmihalyi considered as intrinsically motivating, providing pleasure when performed and, therefore, leading the individual to a state of deep involvement and intense feelings of happiness and personal satisfaction.

Csikszentmihalyi (1988, 1992, 1999) argues that the flow occurs in specific conditions, when the attention is entirely focused in the activity while feelings, wishes, and thoughts are completely aligned. Eight elements that define this experience were identified: balance between challenge and skill; clear goals and feedback; full concentration on the activity and the current moment; merging of action and awareness; sensation of control; loss of self-awareness; loss of time notion; autotelic experience. When people reflect on what they feel when they experience a very positive event, they mention at least one of these eight elements.

Skill-challenge balance: there is a balance between the challenge with which the subject is involved and their skill to respond to it adequately (Figure 1).

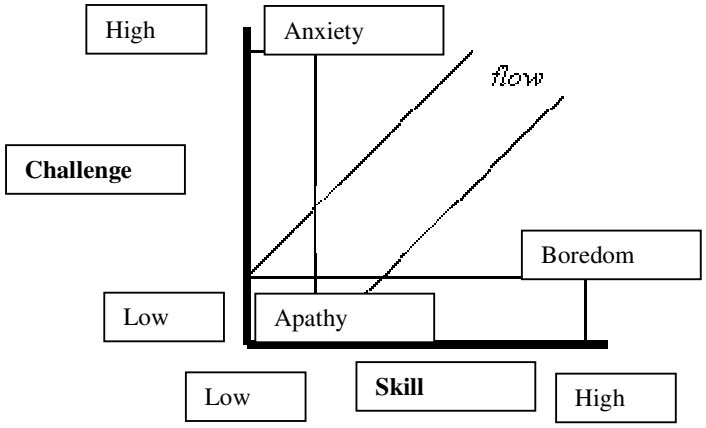

Figure 1. Relation between the level of challenge/skill and flow (adapted from CSIKSZENTMIHALYI, 1992, p. 113).

Clear goals and feedback: clearness on the goal to be achieved, knowledge of the rules and the necessary actions for the activity to be successfully formed. Effective indicators about the current performance in the task.

Full concentration on the activity and the current moment: attention is fully focused on the task and the present moment; no psychic energy is wasted to process information that is not relevant to the activity.

'Merging' feeling between the action and consciousness: the involvement in the activity is so intense that the actions seem to occur almost automatically, in a completely spontaneous, natural way. The person then does not see themselves as distinctive in relation to the actions they perform.

Sensation of control: in the flow, there is a sensation of control over the situation, yet there is no effective concern regarding it. There is satisfaction in having control over oneself even in difficult or complex situations.

Loss of self-consciousness: the perception we have regarding a self (the sum of consciousness contents – memories, actions, wishes, pleasures, and pains, and the hierarchy of goals we build over our lives) that is separated from the world surrounding us no longer exists. When we are deeply involved (connected) with what we are doing, we have a feeling of union with people, things, or the environment surrounding us.

Feeling of distortion or loss of time notion: some people describe certain temporal disorientation or loss of the time notion. Some even report a sensation in which time runs quite fast, while others argue that it has run quicker than the fact itself.

Feeling of living an autotelic experience: according to CSIKSZENTMIHALYI (1992, p. 103), "the fundamental element of a maximum experience, or flow, is the fact it has a goal in itself. Even if it is initially performed for other reasons, the activity that absorbs us becomes a goal on itself". The result of experiencing the flow is the perception of an "autotelic experience", which is capable of providing a deep feeling of pleasure and satisfaction; the fact one is there and is able to perform the activity is the reward.

Out of the eight elements, three elements (challenge-skill balance; clear goals and feedback; full concentration on the activity and the current moment) can be considered as elements that are needed for the flow to occur. The remaining ones (action-consciousness merger; sensation of control; loss of self-consciousness; loss of time notion; autotelic experience) can be interpreted as consequences or perceptions of the occurrence of the mental state. Such division seeks to facilitate the understanding of the phenomenon and the analysis of data in the study.

Csikszentmihalyi (1999) points out that sport activities are potential flow state generators. They include all the necessary elements for the flow to occur, and include activities that retain our attention, have clear goals, provide feedback, and represent challenges that must be faced with determinate capacities or skills.

5 METHODOLOGY

The data were qualitatively analyzed and the form in which the subjects interpreted their experience had the most relevance for the purposes of the study. Ten practitioners of street running (six men, four women) were selected, for being practitioners at the moment

of selection and their engagement in the activity (3 to 46 year of practice). The runners were not considered as elite athletes, as they did not take part in competitions of such category and had other professions for their livelihood. All of them practiced at least three times a week and only one of them did not take part in any competition. The runners were 23-64 years old.

The participants initially received an Invitation Letter for the participation, with information on the topic, the form of data collection, and further guidance. In the event they accepted it, they should sign a consent agreement, authorizing the use of the data, and receive a questionnaire, with personal data and information on their involvement with running, providing an overview that allow for the crossing of information with the answers provided in later interviews.

A semi-structured interview was carried out, in which the participants manifested their opinions orally, following a basic script of questions formulated by the interviewer. All interviews were recorded in a digital device and transcribed for the content analysis. The research protocol was approved by the Ethics Committee of the Unicamp College of Medical Sciences.

The content analysis method was used for the analysis of the data, which, according to Triviños and Molina Neto (2004, p. 159), is concerned with the study of motivations, attitudes, beliefs, values, and trends that, at the first sight, are not quite clear. Bardin (1991) argues that the content analysis comprises a set of communication analysis techniques, which seeks to obtain, via system systematic procedures and the objective description of the content of the messages, indicators, quantitative or not, which allow for the inference of relative knowledge regarding production and message receipt conditions.

After the literal transcription of the speeches (gross data), they were separated in analysis grills (nine grills); in one of them, the runners should complete the following sentence: “For me, running is:”, which was constant in the questionnaire and allowed for the checking of the consistency of the answers provided in the interviews. The other eight grills comprised answers to the questions directly formulated to the interviewees, or raised during the interviews. They were:

1) When did you first become interested in running and why?

2) Why do you currently run?

3) If there were not any competitions, would you still keep running?

4) What are the most common feelings when you are running?

5) What are the most common thoughts when you are running?

6) Report an experience related to running that was remarkable to you.

7) How do you feel about participating in the same competition of elite athletes?

8) Leave a message about running to people.

All related answers were grouped in these grills, irrespective of the moment they appeared in the interview, while care was taken so that they would not be out of context. The next step comprised the separation of these data within the grills in meaning units (paragraphs or paraphrases concentrating the interviewee's reasoning). Each meaning unit was given a sequence number in order to facilitate later analysis stages and their traceability. After that, an interpretation procedure was performed for the gross data, aiming at clarifying the central idea of the interviewee's speech and allowing for its categorization. An initial category code was attributed to each meaning unit; they were then grouped according to their category code, maintaining their initial number. The categories that arose from the analysis were: Incentives (favorable – unfavorable); Feelings (favorable – unfavorable); Thoughts (favorable – unfavorable); Own Experiences (positive – negative); Other People's Experiences (positive – negative); Information Item.

At this stage, a new checking was performed for all meaning units, now with interpreted data, aiming at verifying their suitability with the category they were included in and, if needed, they were framed in other analysis categories.

The following stage was the separation and grouping of meaning units by topics, which were quantified by the number of times and interviews they appeared.

6 DATA ANALYSIS AND DISCUSSION

The experiences, feelings and thoughts that the patients reported to experience while running, were analyzed from the perspective of intrinsic motivation and flow theories, and we sought to identify the possible relation between the analyzed items and their permanence in the activity for longer periods of time.

Initially, we sought to identify the reasons that led them to choose running as the sports activity they would practice and what they considered to be their initial influence upon their engagement into this activity. The most frequently mentioned answer (four practitioners) was the influence of someone with whom there was an affection bond, such as parents, siblings, lovers, or friends. We may relate this answer to the need for affiliation, which is defined: "[...] the desire to be in affective, friendly relations with people"

(MURRAY, 1978, p.159). This reason seems to have been crucial for these people to join the activity.

The second most frequent answer, which was mentioned in three interviews, was the running experience in school, during Physical Education classes. One of the individuals also mentioned the influence of running at a military institution. That indicates the importance of physical, sports activities in school or at programs that promote people's participation and involvement. Opportunities should be created so that a larger number of people may experience physical and sports activities, stimulating the initial motivation for the existence of interest and engagement in any of them. The school environment, clubs, associations, and programs linked to city halls or other entities play a very important role in this aspect.

One of the practitioners reported to have started running following a medical indication and was requested to perform an aerobic activity due to health problems, choosing running. The awareness of the health benefits arising from the regular practice of physical and sports activities shows the importance of the adoption of an active life style by people. This reason seems to be related to the need for avoidance of damages, which is, according to Murray (*apud* MURRAY 1978, p.152), the need to avoid pains, physical injuries, illnesses, and death.

Another practitioner revealed to have initiated the running practice due to the fact it is an individual sports activity, in which decisions and consequences are related to oneself, irrespective of other people. This aspect seems to be coherent with the need for autonomy, defined by Murray (*apud* MURRAY 1978, p.152) as one's need to become independent, free of restrictions, and resist to coercion. Avoiding or abandoning activities that are prescribed by prepotent authorities. Being independent and free to act according to one's own will.

We may infer that external incentives play an important role in the initial adhesion to the physical activity. Eight practitioners pointed out that they initiated the running practice by influence of someone close of due to running experiences at school or another institution, and one practitioner mentioned medical indication. All of them comprise extrinsic reasons to the activity.

It was also possible to identify through the analysis of the interviews that the reasons for the engagement in running, pointed out by the participants, were not the same as those responsible for their permanence, or other reasons were added to the original reason.

According to some, the need for affiliation, for example, seemed to direct their behavior regarding the activity, while other reasons were added. Other participants, however, acquired better expressiveness, as the need for achievement, defined by Murray (*apud* MURRAY 1978, p.153) as the need to perform something hard, overcome obstacles, and reach a high performance standard, overcome oneself and others. People feel motivated to improve their personal performance in running, or make efforts to maintain the level of performance they have reached. They establish quality standards and seek to measure their productivity qualitatively.

Another reason that was often present in the runners' discourses, which seem to be quite related to their engagement in running, is the need for playful activities, which Murray (*apud* MURRAY, 1978) defines as the need to act for fun, without any other purpose, seeking a pleasant relaxation from tensions, taking part in games, sports, dancing, etc. This reason seems to have directed the behavior demonstrated by the interviewees

The reasons that lad the practitioners to initiate the activities were not always considered as responsible for their permanence; they also mentioned that other reasons were added to the original ones, reinforcing the engagement in the activity. According to Murray, not all people show all reasons or needs he has found. We may feel all of them during our lives, yet we may also never feel some of them (SCHULTZ; SCHULTZ, 2002).

Intrinsic or extrinsic motivational trend

We analyzed in the answers what the practitioners pointed out as the main reasons that kept them engaged in running, identifying whether the activity was intrinsically or extrinsically motivated. In the questionnaire they filled out, we requested them to complete the sentence: "For me, running is :". The answer complemented the analysis of the discourses obtained during the interviews. We also requested them to leave a message about running to people, in which they could demonstrate what was pleasant and rewarding about it, in an attempt to transfer such content to other people. The obtained data provided elements that allowed for the assessment of the prevailing motivational trend among the interviewees. Chart 1 shows subjects grouped within the categories, measured by the number of times they appeared during the interviews.

Intrinsic Motivation	**Practitioner**										
Topics	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**%**

Endeavor, resolution, commitment.	4	7	6	3	6	6	4	8	8	10	100
Good performance, good placement in competitions.	2	7		13	5	20	12	11	15	6	90
Feeling of need, an important part of life, life style.	1	1	8	3	2		1	4	5	10	90
Well-being, greater physical and mental willingness arising from the running activity.	6	1	9	4	2		4	1	3		80
Feeling of overcoming, or conquering something.	8	8			9	5	8	4	3	5	80
A moment to organize life, think about family, work, daily life.		3	1		3	7	1		7	5	70
Feeling of freedom, being involved with nature.	3	7	2				5		2		50
Feeling of doing something enjoyable.	4	4	1		1		1				50
The fact it is an individual sports.		4	3	1					2		40
Feeling of mission accomplished.	1					1	1		1		40
Feeling of gratitude for running.	2						1				20
Quality of life.							4				10
Thinking about great athletes to inspire motivation.										2	10

Chart 1: Topics related to the intrinsic motivation to running (number of times they appeared in the interviews).

These items are feelings related to or arising from the practice, or reflect the way the subjects relate themselves to running in terms of feelings and thoughts involved; they characterize the intrinsic motivational trend for the running practice.

Extrinsic Motivation	**Practitioner**										
Topics	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**%**
Expectation of health benefits	1		3	4	3	1	2	3	1	3	90
Incentive by someone near	3	5		3	2	2	8	2	1		80
Coexistence or insertion in a group		9				12	3	1	2	11	60
Weight loss	2	2		4		5	1				50
Participation of elite athletes in competitions							1	2	3	5	40
Incentive from other people in competitions	1								1	1	30
Friendship and union among runners	2								3	1	30

Chart 2: Topics related to the extrinsic motivation to running (number of times they appeared in the interviews).

The topics in chart 2 are related to the extrinsic motivation, as they represented something to be attained as a reward for the practice, or something expected to be attained from it. Depending on the level of importance the person attributes to them, their absence can have a negative influence on their practice.

We should take into account that extrinsic rewards can contribute to the promotion of intrinsic motivation, provided that they are perceived by people as a reward, and not as a driver of their behavior (WEINBERG, GOULD, 2001). This is the case of extrinsic elements found in the speeches. They are seen as a reward for the involvement with the activity, and not as something received to drive their behavior or performance.

In the analysis, we verified that all practitioners had intrinsic motivational trends as for the activity. This indicates an important link between the intrinsic motivational trend and the engagement and permanence of these runners in the activity.

Flow mental state during street running practice

In this stage, we analyzed the aspects that were present in the practitioners' discourses, which could favor the occurrence of a mental state of deep involvement in the activity as a flow, and infer that these practitioners experienced a mental state similar to their running experiences.

In order to obtain data that could enable the analysis, the following questions were asked to the participants: what were the most common feelings and thoughts they noticed while running, and a description of a running experience that had been marked in their memories as very rewarding, whether in training or a competition. The feelings and thoughts the runners noticed during the activity, important elements related to the experience of a different mental state as the flow, and the most significant experiences for them, revealing moments of deep involvement and satisfaction regarding running, consistently with the theory.

We attempted to identify whether the topics that emerged in the analysis (Chart 3) had any relation with the flow elements, i.e., indicated that the practitioners maintained a balance between the challenge represented by running and the skill to respond to it, if they were fully immersed in the activity and focused on the current moment, maintained clear goals, and sought to obtain feedback to assess the outcome of their actions.

		Practitioner										
Flow dimension	**Topic raised in the analysis**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**%**
Balance between challenge and skill or capacity.	Realistic view of capacities and situation.	3	5		1	5	22	5	5	10	8	90
	Ease performing the activity.	2	3	2			8					40

Clear goals and feedback.	Goals and targets to be achieved.	4	5		1	3	12	2	4	1		80
Full concentration on the activity and the current moment.	Maintenance of focus on the activity and current moment.	6	1	7	3	3	5	1	7	6	11	100

Chart 3 – number of times the topics related to the necessary flow elements appeared in the interviews.

Challenge-skill balance: the runners' perception regarding the challenges of running and the perception of their skill to respond to them is an important element for the flow experience to occur. Two themes that emerged in the interviews indicated a relationship with this dimension: a realistic perception of one's skill and the situations (nine interviews) and the perception of ease regarding to the practice of the activity (four runners).

The first topic, the realistic perception of one's skills and the situations has an important implication in the flow dimension. Only with a realistic perception of what we are capable of doing and the challenge with which we deal, it is possible to experience moments of satisfaction and total involvement with the activity. Figure 1 (page 5) shows that if we are facing a challenge that is believed to be beyond our abilities, we will become anxious, and if we are involved in a challenge that is viewed as much below our abilities, we will become bored.

As for the second topic, the ease regarding the activity, it does not exactly mean the task was easy for the practitioners, although they were able to establish very varied level of difficulty while running (ranging route, pace, duration, elevation, etc..), they pointed out the personal perception of having a natural skill to run. We may infer that the size of the flow was present in the discourses of all runners amid the topics, while some of them mentioned the two topics related to it.

Clear goals and feedback: having clear objectives in mind allows for the adjustment of the actions to the task requirements task and clarity on the contribution of one's actions to achieve the goal. Having clear objectives is an opportunity to use and refine personal skills (IAOCHITE, 1999, p. 31). Eight participants have demonstrated to possess very clear objectives and goals pursued while running, whether in training or competitions. The runners tried to make a monitoring (feedback) to assess whether they were able to achieve the targets set, using tools such as a stopwatch, frequency meter, controlling the time after each kilometer of using training sheets, etc. It is important to be aware the purpose of the

activity, either during training or a competition, and to have means to assess whether it will be achieved. The flow dimension was mentioned in the speech of eight interviewees.

Full concentration on the activity and the current moment: full concentration on the task and the current moment prevents the attention from being diverted to irrelevant information. In our daily lives, we are hardly fully focused on what we usually do. We usually perform activities thinking about things that have little relation to their implementation. The concerns and anxieties usually stay on our minds. Csikszentmihalyi (1992, p. 91) argues that this is why the flow improves the quality of the experience. Clearly structured requirements of the activity impose order to the conscience, preventing common disorder.

In several situations, the practitioners demonstrated to be able to fully maintain their attention on running, especially during competitions. They indicated that they are fully immersed in the current moment during competitions. While training, answers varied considerably. Some reported they could focus entirely on running, while others affirmed that unrelated thoughts and feelings, such as daily organization, family, work, etc., appear at some moments. The practitioners also said that conversations favor the dispersion of the attention focused in group trainings.

These are the three key elements for the flow experience to occur; it is possible to identify them in the speech of most interviewees, indicating that these runners may actually have experienced a flow mental state. This was verified by the analysis of the other dimensions.

We tried to analyze the topics that could be related to the perceptions of those interviewed by Cskszentmihalyi and other researchers regarding experiencing a flow mental state (Chart 4): merging of action and consciousness, perception of control, loss of self-consciousness, loss of the time notion; autotelic experience.

		Practitioner										
Flow dimension	**Topic raised in the analysis**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**%**
Merging between action and consciousness.	Feeling of performing the activity without taking great efforts.	1					4		2			30
	Feeling of forgetting the world, oneself, problems; enjoying the moment.	8								1	2	30
Feeling of control.	Feeling of control over the situation.		1				9		1	1	2	50

Loss of self-consciousness.	Feeling of self-confidence; self-esteem.	1	2					4	2		1	50
	Feeling of equality; union with other runners or the environment.	1										10
	Feeling of inner peace, calmness, tranquility, relaxation; therapy-like feeling.	3	3	10	4	4	1	2	6	2	1	100
Feeling of time transformation.	Feeling that time has run really fast.							3		1	4	30
Autotelic experience.	Feeling of pleasure, satisfaction, happiness, contentment; something compensating.	21	11	3	4	10	8	9	7	9	8	100

Chart 4 – number of times each topic related to the flow perception appeared in the interviews.

Merging between action and consciousness: it is a feeling of deep involvement with the activity that is performed, leading to an automatic, spontaneous action. The person does not see him/herself as dynamically distinct from the activity being performed.

Two topics that emerged in the analysis seem to be related to this flow dimension: the feeling of performing the activity without much effort (mentioned by three runners), similar to the description provided by CSIKSZENTMIHALYI (1992, p. 85) on people's perception of this dimension: "There is a feeling of movement that is apparently free of effort." The runners report experiences in which they had the feeling they were having a very good performance in the activity without a perception that they had to make great efforts to do so.

Three interviewees reported a feeling of disconnection from the world when they were running, something found in many examples provided by CSIKSZENTMIHALYI (1988, 1992, 1999), about this flow dimension. The runners considered this as a positive, enjoyable and pleasurable feeling. These moments stand out in the practitioners' memories as special and different, in which what matters is running and the experience of that moment. Problems and difficulties remain in the background and do not enter the focus of attention during these moments.

Half of the interviewees reported one of those two feelings, indicating that the flow dimension is similar in their experiences.

Perception of control: during the flow, a feeling of control can occur, but without an actual concern regarding that. It seems that satisfaction comes from the feeling of having control over themselves in difficult or complex situations, not over the situation itself.

Five interviewees reported to have gone through experiences related to this flow dimension. It should also be considered that this feeling of control is linked to a feeling of being physically prepared for the activity, particularly in competitions. The fact of having had a good preparation may provide the practitioner with a greater sense of control to monitor his/her pace through the kilometers and check if he/she is able to maintain his/her target, in addition to a greater emotional tranquility for knowing he/she is properly prepared.

Loss of self-consciousness: this aspect of the flow may arise from the deep involvement in the activity. There is no availability of attention to remember the past or worry about the future. This is the opposite of what normally occurs in our life. We are rarely fully immersed in the activities we are doing; our thoughts and feelings lead us from one side to another, and we spend most of the time as if we were daydreaming.

loss of self-consciousness does not mean the loss of consciousness, but the self, the information we use to show ourselves who we are, is below the threshold of conscious perception, leading to a feeling that the limits of our being have been expanded. Because of that, after a flow experience, the perception the person has of his/herself can be stronger and more confident. This has similarities with the relationship the practitioners establish between running and the feeling of confidence and self-esteem improved due to the activity, which was identified by five corridors.

Another manifestation of the flow dimension is related to the fact the perception that we have a self that is separate from the world around us ceases to exist. Some people describe it as a feeling of unity with the environment around them, such as a mountain, a football team or a group of competitors. One of the practitioners reported the perception of a feeling of equality and unity with other runners during the competitions, which seems to be related to that dimension.

One of the consequences of this flow dimension is a feeling of tranquility and balance resulting from the activity. CSIKSZENTMIHALYI (1992, p. 99) argues that whenever a person experiences this dimension, they can notice something like a passive obliteration of the self, a feeling of "being taken away by the tide." All runners indicated in their answers that they experienced a feeling of relaxation, peace and tranquility while running or after it. All interviewees reported experiencing at least one of three feelings related to this flow dimension. One interviewee reported all three feelings and four

individuals reported two of them. Therefore, this flow dimension seems to be similar to the practitioners' experiences.

Loss of time notion: people who are experiencing the flow may have the feeling that time passed differently from usual, a feeling that time was faster or slower to pass. This shows the relative aspect of time. There seems to be a kind of temporal disorientation or loss of consciousness regarding the passage of time. Because of this, people can spend hours immersed in the activity without realizing what they have done, or have the feeling that an action that was performed in a few seconds or minutes took much longer.

Three runners mentioned experiments that demonstrated this feeling that the time passed much faster it than had actually occurred. For example, in a half-marathon competition (21km), carried out in more than 2 hours, that is, a relatively long time running, one practitioner reported the feeling that time passed very fast, and was surprised to realize the competition had already been finished.

Autotelic experience: the feeling that seems to best characterize the flow experience, is that performing the activity is the reward that the individual seeks. When experience is intrinsically rewarding, life is justified in the current moment and we are not trapped in expectations of future rewards. Several reports by interviewees indicated that they experienced this flow dimension in their practice. The pleasure, joy and happiness to be able to run, by doing something they believe to be worth it, appeared quite frequently in reports of all interviewees when talking about the feelings related to running and the experiences.

This dimension is also very significant for this study as it reveals the self-sustaining character of the activity, in which pleasure and satisfaction that people feel while running are probably the rewards that keep them engaged in the activity, i.e., they are intrinsically motivated to keep practicing for many years

According to CSIKSZENTMIHALYI (1999, p. 36), flow moments are 'exceptional'. The term was removed from descriptions of moments considered to stand out as the best in people's lives. In the flow, the things we feel, think and wish are completely harmonized. The positive feelings experienced while running seem to be what make the practitioners renew their option to keep running for so long.

FINAL CONSIDERATIONS

The participants of the study revealed the existence of several reasons for their engagement in the practice of running. These reasons coexist and are reinforced. The reasons do not act alone but together, enhancing or inhibiting the subject's behavior with respect to the activity. Physical Education Professionals may have a greater chance of success in their interventions if they recognize the determining reasons for people's behavior, identifying which ones reinforce or inhibit the behavior they wish to encourage. The reasons that are against the behavior of engagement regarding the activity must be understood and worked, in order to keep them from leading the individual to abandon the practice.

An external incentive (extrinsic motivation) seems to play an important role for people to start a physical or sports activity. They are generally extrinsic motivated when they start. Programs that encourage the practice and experience of physical and sports activities in schools, clubs and other institutions are very important, as they provide people with the opportunity to experience such activities, but the promotion of intrinsic motivation may be crucial for them to remain engaged, and such contribution should be given by the Physical Education Professional.

The study showed a positive relation between the intrinsic motivational trend and permanence in the activity for many years. Interestingly, the Physical Education Professionals strive to stimulate the development of this type of motivation in their students or athletes with respect to activities, as one common problem is people's lack of permanence for a longer period in them.

The experience during the practice of physical and sports activities of positive, intense and significant emotional experiences as the flow can keep people intrinsically motivated. Pleasure and satisfaction are rewards encountered by practitioners, explaining the commitment and engagement. The more people live these experiences, more time and dedication they invest in the activity. A flow mental state highlights the experience in the activity, differentiating it from other everyday experiences and leading people to perceive the activity as something rewarding.

It is also important to adjust individual expectations in the activity to the actual skill of the students or athletes, maintaining a harmonious balance between challenge and the required skill to overcome it. Guiding practitioners, so that they are sure about the goals and what is needed to achieve the desired objectives, helping them find ways to get feedback of their performance in the short, medium and long terms, partially and globally

monitoring their actions, identifying whether or not they are contributing to achieve the desired results. Guiding them to try to remain focused for as long as possible on matters related to the activity, finding strategies to prevent external factors that negatively interfere on their thoughts and feelings. By controlling these factors, people may have more control over their mental experiences, improving the quality of experience in the activity and this may contribute to a greater engagement, due to the satisfaction it brings.

Further studies on flow in sport and physical activities are needed for a more accurate understanding of its dynamics of operation and the obtaining of a greater personal control over it, yet conditions of occurrence can be facilitated through the involvement of Physical Education professionals, as identified in the study, encouraging practitioners to use their maximum potential, as the flow tends to occur when the levels of skill are adequate to the demand of the task and this is a real element of personal growth and self-knowledge.

Intrinsic Motivation and the Flow Mental State in Street Runners

Abstract: This article is a result of the Masters Dissertation held in the University of Physical Education, UNICAMP. Ten practitioners of running participated in the qualitative study. The methodology used was the analysis of content. Most practitioners began activity motivated by outer circumstances, but the intrinsic motivation showed crucial in residence for many years. Relations have been identified among the topics raised in the analysis and the elements that characterize the state mental flow. These elements can be important setters in the structuring of physical activities, keeping the individual intrinsically motivated, resulting in greater attendance, commitment, time and satisfaction.

Keywords: Psychology. Sports. Running. Motivation. State mental flow.

Motivación Intrínseca Y El Estado Mental *Flow* Em Corredores

Resumén: Este artículo es resultado de tesis de máster celebrada en Universidad de Educación Física de UNICAMP. Participó del estudio cualitativo, diez profesionales de raza en calles. La metodología utilizada fue análisis de contenido. La mayoría de los profesionales comenzó la práctica por motivación exterior, pero la motivación intrínseca mostrou-se crucial en la práctica por años. Las relaciones se han identificado algunos temas planteados en el análisis y elementos que caracterizan el estado mental *flow*. Estos elementos pueden ser importantes en estructuración de actividades físicas, mantenimiento de la persona motivada, que llevaría a mayor participación, compromiso, tiempo de práctica y satisfacción.

Palabras clave: Psicología. Deportes. Carrera. Motivación. Estado mental *flow*.

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