Diversi studiosi hanno investigato il legame tra sport e disabilità, concentrandosene sulle esternalità, in una prospettiva sociopedagogica. Ad esempio Bandura sottolinea il valore dello sport come meccanismo di autocontrollo del proprio corpo e quindi di autoaffermazione di se stesso. Allo stesso modo, Andersen, rintraccia nella pratica sportiva la presa di coscienza del proprio corpo e quindi di presa di coscienza del se. Proprio in questa prospettiva si muovono i benefici della pratica sportiva per i soggetto disabile che è capace di promuovere lo sviluppo del sé ed accrescendo la sicurezza del soggetto, ne induce comportamenti volti all'autonomia.

L'attività motoria per il soggetto disabile diviene, favorendo lo sviluppo della personalità del soggetto e l'interazione, un fattore favorevole per lo sviluppo emotivo- affettivo e per la rielaborazioni delle emozioni sia esse positive, come la vittoria, che negative, come la sconfitta.

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5. Tipo di valutazione: I Referee dovranno esprimere la propria valutazione esclusivamente tramite la scheda di valutazione, il cui modello è stato disposto dall'Editor all'interno dell'area riservata del sito della Rivista. La scheda di valutazione si compone di una parte quantitativa (attribuzione di un punteggio da 1-5 ad una serie di affermazioni che rispondono a criteri di originalità, di accuratezza metodologica, di rilevanza per i lettori, e di correttezza della forma e della buona strutturazione del contenuto) e di una parte qualitativa (giudizi analitici e discorsivi circa i punti di forza e di debolezza del paper). In una terza parte i Referee esprimeranno un giudizio sintetico circa la pubblicabilità o meno dell'articolo o alla sua pubblicabilità con riserva. In quest'ultimo caso, i Referee potranno infatti fornire indicazioni o suggerimenti all'Autore, al fine di migliorare il paper. Il format di valutazione è accessibile da parte degli Autori, allo scopo di rendere trasparenti i criteri di valutazione.

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INDICE / SUMMARY

Sport & Disability Management

Sport & Gestione della Disabilità

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Sport can represent a tool able to effectively pursue the inclusive purposes of disability management. The adoption of the principles of business management is important to fully exploit the potentialities of sport as a means of inclusion for the disabled.

In fact, the analysis by Cottingham et al. (2014) showed that sport represents an opportunity for development for disadvantaged communities, like that of the disabled, and that it should be organized and managed precisely in relation to such an opportunity.

In addition, the organized sport is also an efficient strategy to achieve social outcomes for disabled young people. In fact, sports athletes with disabilities in the U.S and in school age have developed a higher level of self-esteem and autonomy than those who do not practice sports (Beyer, Flores & Vargas-Tonsing, 2009). In perfect agreement are the results of the study on sport activities for people with disabilities in Australia, which reaffirmed the level of autonomy reached by athletes for the same disabling condition, sex, age and education level. Moreover, Sotiriadou & Wicker (2014) add the need to propose policies to encourage sport practice in relation to the different forms of disabilities.

Again, Legg & Steadward (2011) show that an event such as the Paralympic Games has created a strong sense of awareness that emerges both from the subjects with disabilities, and in their respect, about the condition and the possibility of achieving success in life through an "Olympic" sporting event. Thus it transcends the concept of disability understood as a limit and it gives the chance to the disabled to be active and productive sports, and consequently, a social and economic resource.

In fact, motor activity managed optimally has always been an element able to improve learning and relational skills of young students.

Confirming the strong relationship among sports, disability and management, the literature has often led to evidence the need for performing management policies, so that they could generate and amplify the benefits that sport can give to the disabled, and consequently to the whole community, both socially and economically (Cottingham et al., 2014; Sotiriadou & Wicker, 2014).

The study of the relationship between sport and disability and all related methodological, didactics and education approaches aimed to developing inclusion, represents the main thematic research of this issue.

Pilot Study in Youth Volleyball: Video Analysis as a Didactic Tool

Studio Pilota nella Pallavolo Giovanile: la Video Analisi come strumento Didattico

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Abstract

Efficacy of the spike is important in volleyball score and efficiency of training process has a prior aim for coach, in the same time video analysis is used to purpose quantitative aspect of performance. Could be useful the use of performance as teaching method to improve single sport skills. The aim is to utilize this teaching methodology with visual feedback by video analysis to improve the technique model of spike. Methods is experimental and involve an under 21 women team, divided in control and experimental group, run of 10 training weeks while is going on the championship. Experimental group reviews itself by video without comments or helps of coach who evaluates specific technical aspects of spike by specific descriptors in check list of sport skill in presence of the athletes. The improvement of sports skills of control group is increased in minor percentage than of experimental group for difference of 12%. The different percentage could be attributed at the presence of the visual feedbacks in teaching training method. Data shows the future use of this tool in training and in physical education and not only for statistics or tactics scheme.

L'efficacia dello spike è importante per ottenere il punto nella pallavolo e l'efficienza del processo di allenamento ha un obiettivo prioritario per l'allenatore, mentre la video analisi può essere utilizzata come obiettivo per l'aspetto quantitativo delle prestazioni. L'utilizzo della video analisi potrebbe essere un fondamentale strumento didattico per migliorare le abilità sportive individuali. L'obiettivo è quello di utilizzare questa metodologia didattica con feedback visivo mediante la video analisi per migliorare il modello della tecnica dello spike. I metodi sono sperimentali e coinvolgono una squadra femminile di 21 anni, divisa in due gruppi uno di controllo e uno sperimentale; sono state utilizzate 10 settimane di allenamento durante il campionato. Il gruppo sperimentale esamina il video senza commenti o aiuti da parte dell'allenatore che valuta gli specifici aspetti tecnici dello spike dai descrittori inseriti nell'elenco di controllo delle abilità sportive in presenza degli atleti. Il miglioramento delle abilità sportive del gruppo di controllo è aumentato in percentuale minore di quello sperimentale con una differenza del 12%. La percentuale diversa potrebbe essere attribuita alla presenza di feedback visivi nella didattica del metodo di allenamento. I dati mostrano che questo strumento può essere utilizzato in futuro nell'allenamento e nell'educazione fisica e non solo per il sistema statistico o tattico.

Keywords

Physical Education; Sport; Didactics; Spike;

Educazione Fisica; Sport; Didattica; Spike

Equal Contributors

Introduction

The sports training is usually carried out with the aim of improving performance. One of the variables that influence fundamentals learning is feedback. The feedback returns to athlete feedback information from the senses or from the outside world on a particular movement.

A source of feedback is given by the athlete's sensory channels (sight, hearing, touch), called intrinsic feedback. Even if some information from these sources are clear (for example, "the ball is out") often require athlete's experience (Best, 2010).

A second type of feedback usually comes from an outside source, usually a coach, and is designed to integrate intrinsic feedback. This information is known as extrinsic feedback and helps the athlete to compare what was done with what was intended. For more complex skills, it is believed that the extrinsic information accelerate the learning process and it may be necessary to help the athlete to achieve best performance levels.

The extrinsic feedback can be "given" to the athlete in two main forms: results knowledge and performance knowledge. In the first case the information is relevant to the gesture outcome or action outcome (notational analysis), while in the second case the information is relevant to the movement that led to that outcome (performance analysis). In the volleyball field, most of the feedback is provided verbally by the coach, or at least in the form of data thanks to scout the league matches (Alesi et al, 2014). Little is left to extrinsic visual feedback, using movies to analyze the performance of the motor gestures.

Furthermore, Hughes & Franks (2005) say that in many team sports, it is difficult for an observer to see and assimilate all the action taking place on the competition. It was noted that, because of coaches who are able to see only those phases of the game related to a specific stage, the most peripheral part of the game is lost.

So often, coaches are limited to base their feedback after the race on partial information of the team performance or individual athletes performance. Recent research, however, have shown if the feedback is objective and quantitative, the greater its effect on performance. The video analysis, ie the analysis of sports performance by watching the video, is used primarily for use in the quantitative performance of athletes through the notational analysis (Hughes and Frank). It may therefore be helpful to use and develop this methodology extrinsic-visual feedback given through the use of video analysis of motor gestures specific to Volleyball (Tursi, Napolitano, Raiola, 2013a).

Currently there are no specific studies about the use of performance analysis during training. The aim of this study is to verify whether this method can improve the performance of athletes, simply by reviewing their own movies while the performing of the particular "motor skills", so as to increase the awareness of oneself, of one's body, knowledge of the act.

Methods

The study is experimental. It provided the use of video analysis in training, with the aim to improve in particular a fundamental: the Spike.

12 athletes, women Under-21 are divided into two groups: a control group and an experimental group. The division is made with respect to tactical roles of each of the players. In this way, in each group there is the presence of: 1 setter, 2 outside hitters, 2 middle blockers, 1 opposite hitter (Napolitano & Tursi, 2013).

Both groups perform 10 weeks of specific training for the spike. Training sessions are held concurrently with the league, which includes 10 matches (one per week). The athletes are filmed at the beginning each training session, while perform the spike, first without the ball and then with the ball. Only the experimental group was given the op-

portunity, before each training session, to see their spike performance of the previous training session.

The coach does not affect the intrinsic visual feedback of the athlete, that reviewing himself, perceives in an autonomous way errors and weaknesses. Only during training the coach, in a prescriptive way, helps athletes with exercises, notes and extrinsic oral feedback (Tursi, Napolitano, Raiola, 2013).

With Kinovea, free and open source software, at the end of the project, is made comparison between first and last video clip, for each athlete and for groups, in order to verify the performance improvements, to note the differences between the groups, and also for get feedback on the effectiveness of visual feedback. In addition, the data retrieved with the software and the observation of the technical, are compared with the scouts results of the 10 league matches.

The spike consists of a sequence of elements: Optimum preparation for the hit on the ball, steps to spike, jump phase, Air Phase, hit on the ball, fall to the ground (Napolitano, 2014).

Optimum preparation for the hit on the ball:

Is all that precedes the run. It is position your body in optimal condition in relation to the trajectory of the ball, in order to perform the run more effectively. Being able to hit the ball making the most of the acceleration given by a good running start and the force of the blow of the hand is only possible if "we leave" and "jump" the right instant.

First step (left foot) and the next two steps (left-right): steps to spike

It 's the time when you buy the body horizontal speed. This speed must be as high as possible, but not such as to cause a loss of coordination of postural control. The race usually starts by one hitter with the forward movement of the right foot with a short and relatively slow step followed by a longer wheelbase and quick and concluded by a leap grazing, long and fast when the right and left foot coming in succession on the ground, with the left slightly more advanced to get a better balance.

Jump phase:

Is the movement in which the acceleration produced by the run is verticalized and transformed into jumping ability. The best jump takes place when it has an advance of the support to the ground of the heel. The barycentre of the body is in the retracted position and then lowered slightly to be projected upwards in the movement in which the foot leaving rolled, also in response to contemporary momentum of the arms from behind towards the front top.

Air Phase:

Is the next phase of the action of the upper limbs that brings the body to assume an arched position, in order to obtain a "pre-stretch" (abdominal and pectoral above) and a consequent greater development of transferable force on the balloon. The movement of the arm must be such as to allow hitting the ball at the highest point possible; the arm that does not attack rises first in the direction of the ball, while the arm that attaches carries a load to the top behind.

Hit on the ball:

Action that the hand performs at the moment of contact with the ball and which may be gender:

- Spike: the hand acts so as to cause an increase in speed by raising "whip" of the wrist.
- Lob: the shot is made only touching the ball with the fingers that are slightly open.
- Muffled: differs from spike as the final movement of the arm is voluntarily slowed down.
- Fall to the ground:

It is possible to make it less traumatic. This should be done on both toes at the same time. Following the damping action is completed thanks to a slight knee bend.

Results

The results showed the importance of video analysis training and visual feedback. All athletes are improved, thanks to the training program specific to the act of attack. The Experimental group, compared to the control group, is improved more, and in less sessions. Also scouts show a significant difference between the two groups of athletes.

The athletes of the Experimental group carried out the attacks of 12% more positive or "point", respect to the companions of the other group. Everything seen from the films of comparison, the match video and data of the scouts. Linear regression showed a steady trend in the increase of skill in the succession of the training of the individual athletes.

Below, to simplify the discussion of the results, are taken as example 4 athletes. The latter have played by all the holders league games, and thus lend themselves well to our research work. Of these four athletes, two (a central and a spiker) belong to the group of control, and the other two athletes (a central and a spiker) belong to the Experimental group.

The athletes in the experimental group are shown in light yellow, while those of the control group with the color Blue In the first chart (Fig. 1) shows the results of the entire league scouts. In each mini table of each day, the attacks are reported in (#), the attacks positive (+) or not attacks replayed optimally adversary, attacks negative (-) re-played by the opponent, attacks wrong or walled (=). Finally, the positivity (Pos) or the sum of the attacks point and positive. At the end of each round, a table collects the total number of attacks and the number of attacks positive, with relative percentage. The same table is presented again at the end with the data of the entire league.

In the following graphs (Figure 2,3,4) will highlight the differences between the athletes, and the linear regression, namely the development of positivity of the attacks during the days of the championship.

Figure 1: Entire season scout

N	Athlete	1st Match					2nd Match					3rd Match				
		#	+	-	=	Pos	#	+	-	=	Pos	#	+	-	=	Pos
3	03-FabNik	4	4	6	3	8	7	4	9	2	11	8	10	3	2	18
5	05-MenAng	3	4	2	6	7	2	6	3	3	8	2	10	9	6	12
7	07-TopTer	3	2	0	2	5	3	1	0	1	4	2	2	1	1	4
10	10-EspMar	1	4	1	3	5	1	1	2	0	2	2	2	1	1	4
	TOT	11	14	9	14		13	12	14	6		14	24	14	10	

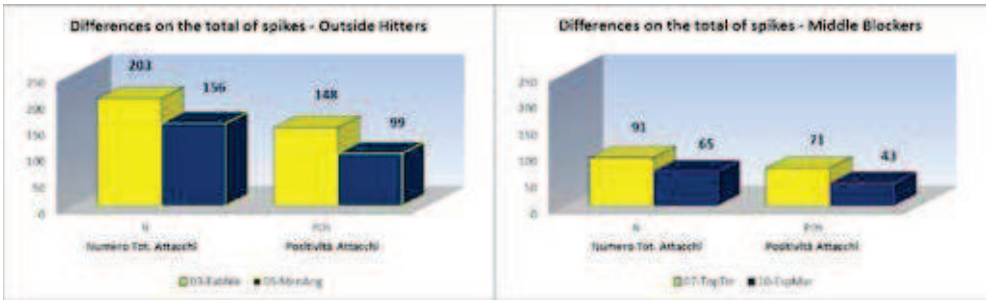
N	Athlete	4th Match					5th Match					Tot. First Round		
		#	+	-	=	Pos	#	+	-	=	Pos	N	POS	%
3	03-FabNik	7	8	4	2	15	11	4	6	2	15	106	67	63%
5	05-MenAng	5	3	2	0	8	5	5	4	3	10	83	45	54%
7	07-TopTer	4	2	2	2	6	3	3	0	1	6	35	25	71%
10	10-EspMar	3	1	1	0	4	4	1	3	1	5	33	20	61%
SQ	TOT	19	14	9	4		23	13	13	7		257	157	

N	Athlete	6th Match					7th Match					8th Match				
		#	+	-	=	Pos	#	+	-	=	Pos	#	+	-	=	Pos
3	03-FabNik	10	9	3	2	19	5	8	0	1	13	7	10	3	0	17
5	05-MenAng	3	6	1	3	9	4	8	0	2	12	3	7	2	2	10
7	07-TopTer	3	4	1	2	7	3	6	0	1	9	6	5	1	0	11
10	10-EspMar	1	4	0	0	5	2	2	1	0	4	1	2	1	4	3
SQ	TOT	17	23	5	7		14	24	1	4		17	24	7	6	

N	Athlete	9th Match					10th Match					Tot. Second Round			TOTAL Championship		
		#	+	-	=	Pos	#	+	-	=	Pos	N	POS	%	N	POS	%
3	03-FabNik	8	8	2	1	16	13	3	1	3	16	97	81	84%	203	148	73%
5	05-MenAng	5	10	4	1	15	4	4	1	3	8	73	54	74%	156	99	63%
7	07-TopTer	5	4	2	1	9	5	5	1	1	10	56	46	82%	91	71	78%
10	10-EspMar	3	3	0	2	6	1	4	1	0	5	32	23	72%	65	43	66%
SQ	TOT	21	25	8	5		23	16	4	7		258	204		515	361	

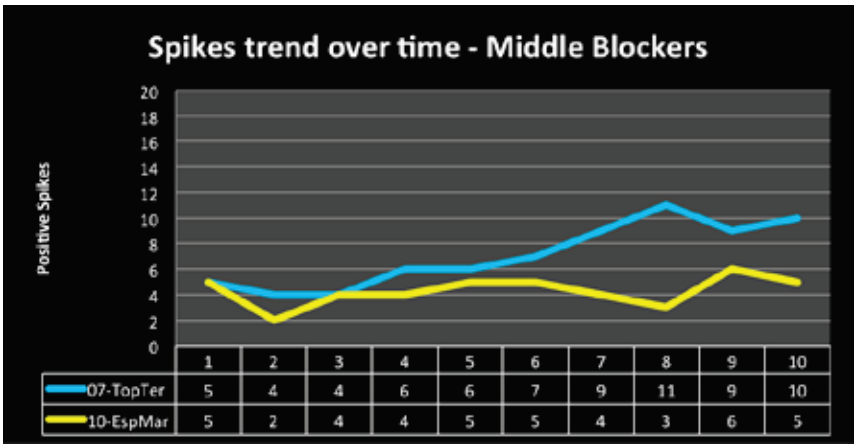
Source: Our Elaboration

Figure 2: Differences on the total of attacks for both outside hitters that for the middle blockers



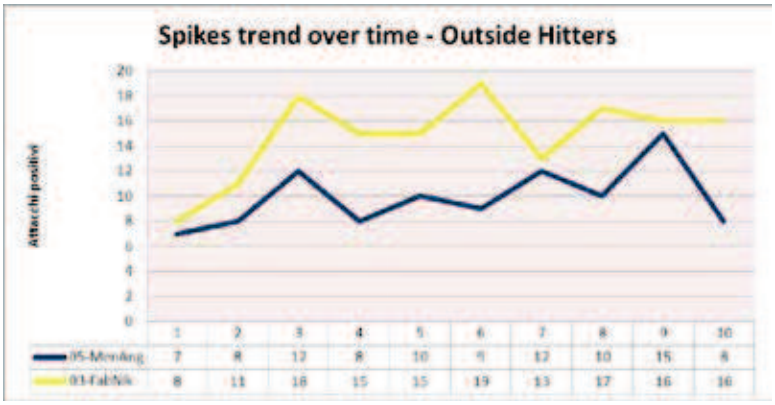
Source: Our Elaboration

Figure 3: Spiles trend over time – Middle Blockers



Source: Our Elaboration

Figure 4: Spikes trend over time – Outside Hitters



Source: Our Elaboration

Discussion and conclusion

These results open an interesting scenario with regard to the research on the effectiveness of video analysis training. It would be useful initially to compare this project with the previous one, to test for differences in learning motor skills, because in the former there was no presence of visual feedback of themselves (Ding & Fan, 2007; Napolitano & Tursi, 2013).

It would also be interesting to find the differences in improvement between the athletes who participated in the two jobs, because they are athletes of different ages. The results were evident in all the athletes. This has led the team to win the championship class played. In the regional finals which will be played at the end of May will be interesting to see whether this difference between the Control Group and Experimental Group has remained constant or increased / decreased.

The future goal is that to investigate this issue by investing other specific fundamental, to enter the video analysis in the theory of volleyball training.

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Contaminazione Pedagogica: un esempio educativo

Pedagogical Contamination: an educational example

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Abstract

This article seeks to address the possibility of interaction and contamination of deeply different educational setting, proposing a sample training. Specifically, we will observe the interaction between nursery children with non-homogeneous groups of adult cognitive impairments. The main goals of the pedagogical project are: the adulthood of the disabled and the strengthening of emotional intelligence.

Questo articolo vuole affrontare la possibilità di interazione e contaminazione di setting educavi profondamente diversi, proponendo l'analisi di un esempio formativo. Nello specifico osserveremo l'interazione fra bambini dell'asilo nido con gruppi disomogenei di disabili cognitivi adulti. Gli scopi principali del progetto pedagogico sono: l'adultizzazione del disabile ed il potenziamento dell'intelligenza emotiva.

Keywords

Pedagogic Contamination, Kindergarten, Adult Disability, Emotional Intelligence, Adulthood

Contaminazione pedagogica, Asilo nido, Disabilità adulta, Intelligenza emotiva, Adultizzazione

Il presente lavoro è frutto di una collaborazione di tutti gli Autori. È possibile identificare lo specifico contributo come segue: Morsanuto Introduzione, paragrafi 1,2,3. Impara paragrafo 4. Di Palma paragrafi 5,6.

Introduzione

Il termine "contaminazione" deriva dal latino "contaminatio" (contaminare appunto), di etimologia incerta, proviene, forse, da un antico verbo "tamino" che vuol dire corrompere la purezza, sporcare. Il suo utilizzo ha quindi avuto un uso negativo: è infatti spesso abbinato all'inquinamento (chimico, biologico, ambientale) sia volontario, sia involontario. Il suo significato comprende però anche un'accezione diversa, cioè fondere, incrociare, maggiormente utilizzate in letteratura, in linguistica o nella critica testuale. Più moderno è l'uso in campo artistico e culturale.

In questo articolo proporrò alcune riflessioni su come il termine "contaminazione" possa essere utilizzato in campo educativo – pedagogico, indicando l'interazione di servizi educativi profondamente diversi e distanti fra loro, e dimostrando come il risultato di questa reciprocità possa portare al raggiungimento di obiettivi specifici diversi in entrambe le realtà.

L'esempio su cui si basa quest'analisi è la realizzazione di un progetto educativo di contaminazione, appunto, di un Asilo Nido (utenza 0-3 anni) con un C.S.E. (Centro Socio Educativo per disabili cognitivi adulti, 20-50 anni) considerato nell'elaborazione di un Piano di Offerta Formativa.

Nello specifico il lavoro prevede l'inserimento di due gruppi di disabili cognitivi, formati ognuno da 6 persone, in altrettanti gruppi di bambini (circa 20 per classe 12-36 mesi).

Lo scopo è lo sviluppo dell'intelligenza emotiva sia nei bimbi, sia negli adulti con disabilità, sfruttando la pratica educativa quotidiana per favorire e potenziare le competenze ed "adultizzare" così l'utenza con ritardo cognitivo.

1. L'infantilizzazione della persona disabile

L'immagine, da parte della società ed in particolar modo delle famiglie, della persona con disabilità, è quella "dell'eterno bambino", bisognoso di cure e attenzioni continue. La cultura protettiva genitoriale viene rafforzata dall'organizzazione sociale che, a sua volta, rafforza l'infantilizzazione delle persone disabili, coerentemente con un'organizzazione pubblica che non prevede per loro ruoli sociali attivi e dunque non ne può programmare la crescita. La persona con disabilità quindi non viene messa in condizioni di crescere, maturare e provare le esperienze tipiche di una persona adulta. Questo modello del tutto negativo porta al raggiungimento di due risultati altrettanto negativi: la società si protegge dalle persone disabili e le famiglie proteggono i loro figli dalla società.

L'immagine della persona disabile come "eterno bambino" determina delle conseguenze che portano a una inevitabile condizione di passività e dipendenza, in forte contrasto con l'idea di crescita e di protagonismo: rafforza il ruolo protettivo che la società affida alle famiglie e offre al disabile un modello di comportamento lassista.

L'applicazione del "sapere naturale"

Le persone con disabilità coinvolte in questo progetto "arrivano" ai bambini con un bagaglio di "sapere" proprio, acquisito nel corso della loro vita attraverso l'osservazione della famiglia e delle persone con cui normalmente interagiscono. In alcuni casi la cultura di appartenenza viene imposta, in altri arrivano autonomamente alle informazioni necessarie per raggiungere la conoscenza. Attraverso il rapporto educativo sono affiancati passo dopo passo nel processo di apprendimento attraverso la creazione di una serie di stimoli, oltre che di un contesto che aiuta nel conseguimento degli obiettivi. La maggior parte di essi, quindi, in modo più o meno diretto, ha potuto conoscere le modalità di accudimento di un bambino.

L'asilo nido è il luogo per eccellenza in cui il sapere naturale di accudimento del bimbo è stato trasformato in un sapere tecnico – scientifico: nel nido non ci sono braccia sufficienti per ogni piccolo, non ci sono fratelli o sorelle maggiori con cui relazionarsi e tantomeno nonne o zie. Essendo un contesto extrafamiliare, richiede l'iperbolizzazione dei compiti di cura: si utilizzano tecniche strutturate ed efficaci qualitativamente. Chi pratica questo mestiere educativo è soggetto ad un processo di tecnicizzazione progressiva del sapere naturale, che allontana le competenze dell'educatore dall'educazione naturale. (Salomone 2013).

La crasi che si viene a creare, unendo il sapere naturale delle persone con disabilità al sapere tecnico-scientifico dell'educatore, permette, a chi gestisce il progetto, di osservare la scena educativa in modo privilegiato: la persona con disabilità impara a selezionare i saperi utili e a trasformarli in competenze immediatamente applicabili. D'altro canto l'operatore riscopre un modo semplice di comunicazione che arriva ad essere ricco di significati emotivi, empatici, spesso utilizzando forme non verbali e prassemiche.

Il setting educativo

Secondo l'analisi di I. Salomone una scena educativa è da intendersi come un'organizzazione di spazi, tempi, persone e oggetti. Il medesimo gesto, compiuto dagli stessi attori nel quadro di scene educative differenti, assume significati differenti.

Ogni scena educativa segue una scena che la precede e prelude alla scena successiva in un percorso e in un intreccio che nel suo insieme produce l'esperienza educativa.

Ogni scena educativa è caratterizzata da un set dei suoi problemi tipici: le varianti di organizzazione degli spazi, dei tempi, dei corpi e degli oggetti propri di ogni setting, non modificano il range dei suoi problemi tipici, ma i modi con i quali presentarsi.

Le scene educative nel loro complesso costituiscono una serie finita e limitata di contesti che corrispondono a situazioni sociali immediatamente riconoscibili. Ogni scena educativa è l'analogo della scena sociale che viene rappresentata, ma nella quale non si identifica.

2. Lo sviluppo dell'intelligenza emotiva

Durante i momenti di condivisione accadono molte situazioni di crisi sia da parte dei bambini sia da parte dei disabili. Queste situazioni sono terreno fertile per osservare lo scambio relazionale. È importante cercare di capire se dietro al comportamento di difficoltà di un bambino c'è un disagio. Quando un bambino è arrabbiato, teso, spaventato, la persona disabile deve fare uno sforzo per immedesimarsi in lui e capire che cosa può aver generato quest'emozione. È compito dell'educatore sforzarsi di capire cosa si celi dietro l'atteggiamento e focalizzarsi sul quadro generale, guidando il disabile nel problem solving. Talvolta le situazioni si invertono ed è il bambino che intercetta la difficoltà dell'adulto ed arriva in suo soccorso.

L'importante è considerare il momento di crisi come una buona occasione per un allenamento emotivo. Il ruolo fondamentale dell'educatore in queste situazioni è l'osservazione attenta, infondendo serenità, dando importanza alle emozioni che sono state messe in gioco, per insegnare a comprendere ciò che viene provato e ad essere compresi. L'educatore, come mediatore, può stimolare la persona disabile ad aiutare il bambino a trovare le parole per definire le emozioni che prova: dare un nome all'emozione forza il disabile ad arricchire il proprio bagaglio sia emotivo, entrando in empatia con il bambino, sia lessicale. Gottman sostiene che "Fornire ai bambini le parole può aiutarli a trasformare una sensazione amorfa e sgradevole in qualcosa di definibile e quindi con confini ben precisi, come ogni altro normale elemento all'interno della vita quotidiana. La collera, la tristezza e la paura diventano così espressioni comuni a tutti e che tutti sono in grado di gestire."

Il bambino così non solo si sente compreso, ma ha anche una parola per definire il suo stato d'animo ed inoltre riesce a sigillare un'alleanza, una nuova amicizia con una figura adulta.

Studi specifici hanno dimostrato che dare un nome alle emozioni ha un effetto rasserenante sul sistema nervoso e aiuta i bambini a uscire più in fetta dalle situazioni di turbamento (Gottman).

Come già accennato è importante aiutare i bambini a dare un nome alle emozioni che stanno provando, etichettandole e distinguendole tra di loro. Molte volte i bambini, ma anche gli adulti, faticano a distinguere alcune emozioni, come, ad esempio, la rabbia e la tristezza. Imparare a riconoscere le emozioni e attribuir loro un nome è il primo passo per un lavoro di alfabetizzazione emotiva e per superare l'incompetenza emotiva della persona disabile.

Un'altra riflessione è come stimolare la persona disabile ad aiutare il bambino a capire cosa succede al proprio corpo quando si è arrabbiati, tristi o impauriti. Stimolarli all'osservazione e ad immedesimarsi nell'emozione provata dal bimbo è il primo passo per imparare a gestire meglio le proprie emozioni. Il linguaggio utilizzato dalla persona con deficit cognitivo, semplice e molto diretto, è un'ottima via di comunicazione con i bambini piccoli, che si sentono capiti e rasserenati dal loro amico speciale.

Imparare a trovare le strategie più funzionali per gestire le proprie emozioni è un processo lungo e che richiede un continuo riassestamento. Gli educatori devono guidare le persone disabili in questo percorso, non imponendo la propria modalità, ma confrontandosi sulle strategie migliori per esprimersi.

È fondamentale, durante ogni momento del lavoro, non reprimere nei bimbi e nei disabili quelle emozioni, che convenzionalmente tendiamo a definire come "brutte" (come la tristezza o la rabbia), perché esse sono fondamentali per il funzionamento psichico e per l'equilibrio di ogni essere umano, ma sfruttarle come strumento di crescita. Ascoltare e osservare gli altri è strettamente connesso all'imparare a riconoscere le proprie emozioni, a sviluppare l'empatia e a realizzare quella vicinanza emotiva fondamentale per entrare in contatto con l'altro.

Un'altra situazione che spesso l'adulto disabile si trova a gestire è la capacità di porre dei limiti ai comportamenti sbagliati e aiutare il bambino a trovare da solo la soluzione al problema. Dopo aver riconosciuto l'emozione che sta dietro un comportamento sbagliato ed essersi messi nei panni del piccolo, aiutandolo a dare un nome a quello che prova, si cerca di fargli capire che, se anche il sentimento e l'emozione negativa sono comprensibili, certi comportamenti non sono giusti. Per il disabile cognitivo avere la possibilità di essere lui stesso normativo e far rispettare le regole così come fanno gli educatori è un momento importante di adultizzazione, in cui attraverso l'emulazione impara ad agire comportamenti adulti.

3. Il gioco

La Play therapy si fonda sul gioco come mezzo per comunicare, gestire e/o risolvere problemi. La prima persona ad utilizzare in maniera formale il gioco associato all'interazione verbale fu *Hermine von Hug-Helmut*, studentessa di Freud, nel 1920 scrisse un articolo nel quale evidenziava "*come i bambini trovassero sollievo e aiuto nel gioco."* Attualmente esistono molti approcci che utilizzano i principi terapeutici del gioco nella pratica clinica non solo con i bambini, ma anche con adolescenti ed adulti. Charles Schaefer, una delle figure di riferimento più importanti nella Play therapy, sostiene che la forza del gioco risieda nella diversità e che questa sia un riflesso della moltitudine di meccanismi terapeutici di cambiamento inerenti al gioco.

Quando i bimbi dell'asilo nido si incontrano con le persone disabili utilizzano il gioco come principale mezzo di comunicazione. Il gioco è il linguaggio spontaneo e naturale dell'infanzia e consente lo sviluppo delle abilità cognitive, motorie, emotive e sociali, permettendo al bambino la libera esplorazione e sperimentazione di se stesso. Con il gioco il bambino impara a gestire e si adatta ai cambiamenti assicurando al bambino sicurezza e controllo della situazione. La contaminazione dei bimbi agita sulle persone disabili ha il potere di ammorbidire le resistenze e le difese rendendo l'adulto predisposto all'apprendimento.

Attraverso l'osservazione dei momenti di gioco "*play around*" sono facilmente individuabili le difficoltà agite sia dai piccoli che dai disabili. E' dunque possibile individuare gli obiettivi su cui poi sarà intrapreso un lavoro atto a raggiungere uno sviluppo pieno e positivo o nel caso dell'adulto, un potenziamento delle strategie di problem solving.

I momenti di gioco sono spontanei e non direttivi, ma i materiali messi a disposizione sono selezionati di volta in volta dagli educatori, lasciando comunque ampia scelta di azione sia ai bimbi che ai disabili.

Gli educatori seguono empaticamente la scelta e lo sviluppo del gioco e dunendosi allo stesso solo se strettamente necessario o se viene espresso l'invito da parte del bambino o dalla persona diversamente abile.

4. L'attenzione alla cura

Il cambio è un momento di grande coinvolgimento fisico e affettivo del bambino nella relazione con l'adulto di riferimento. Le componenti affettive e di relazione, verbale e non verbale, si esprimono attraverso il contatto visivo e fisico con azioni quali guardare, toccare, manipolare, accarezzare. Gesti, azioni, sguardi sono dunque messaggi significativi quanto le parole.

In questo contesto è possibile imparare a conoscere e riconoscere il proprio corpo e quello degli altri e viene favorita la socializzazione, non solo con l'adulto, ma anche tra i bambini.

In questo contesto il disabile non è stato inserito da subito, ma dopo diversi mesi di lavoro con i bambini, dopo cioè che entrambe le parti hanno instaurato relazioni di fiducia ed amicizia. Il trasferimento delle funzioni di cura e di rassicurazione emotiva dall'educatrici alla persona disabile, è un'opportunità evolutiva dai molti significati psicologici e culturali. Crea nuovi legami, tra il bambino e il diversamente abile, che potenzialmente possono diventare esperienze di relazioni buone, complementari a quelle vissute in famiglia e all'asilo, sperimentando forme di attaccamento multiplo.

L'introduzione all'attività di cura ed igiene dei piccoli è stata graduale: prima aiutando i bimbi a lavare viso e manine e solo successivamente è stata introdotta l'assistenza al bagno per i più grandicelli ed infine l'aiuto nel momento del cambio del pannolino.

L'adoperarsi della persona disabile nella cura dei piccoli ha un significato importante, perché sottolinea l'importanza che il bimbo ha per lui/lei e rafforza l'autostima di entrambi. Le operazioni di igiene, pur essendo legate prevalentemente al soddisfacimento dei bisogni fisiologici, permettono al bambino di fare esperienza che "al di fuori" di lui c'è un altro adulto, oltre all'educatrice di riferimento, che è impegnato e attento a lui e ai suoi bisogni.

Ogni ragazzo sviluppa con ciascun bambino delle azioni più o meno simili nel tempo, a volte anche dei piccoli rituali che sono dei momenti privilegiati per la relazione. Ogni bambino tende a relazionarsi con l'amico speciale scelto. Il prendersi cura ha come presupposto della sua validità il cercare di far sentire l'altro importante. La relazione è fatta di scambi e imitazioni che agevolano l'apprendimento.

Un contributo pregnante, e molto significativo, in questo àmbito è stato dato dalla Filosofia del Volto di Emmanuel Lévinas, il quale afferma l'impossibilità di sottrarsi alla "responsabilità" che è elemento costitutivo della relazione. È proprio il volto dell'altro che ci interpella e provoca la relazione, mettendo in questione il nostro modo di essere. Il volto è lo strumento attraverso il quale l'umanità di ciascuno si rivela, si palesa. È quindi un mezzo di comunicazione. È il mezzo di comunicazione primo. Secondo tale approccio, è possibile incontrare l'altro e noi stessi in due modi: *incontro oggettivante* e *incontro personificatore*.

Aiutare un bambino a vestirsi, cambiare un pannolino, fare un massaggio sono azioni che prevedono un contatto visivo vicino, molto forte ed intenso. L'Io e il Tu si relazionano attraverso il volto e più in generale attraverso i gesti, la corporeità. Il corpo rivela le emozioni e i sentimenti, oltreché i pensieri. Mediante l'atteggiamento corporeo, si possono mostrare accoglienza e affetto o indifferenza, freddezza e ostilità. E di fronte a questi ultimi atteggiamenti può cap-

itare di sentirsi “spersonalizzati”: ecco perché l’assistenza continua dell’educatore, che media ogni momento con discrezione, ma con attenzione, è fondamentale nella riuscita del lavoro.

5. Il ruolo dell’educatore

Gli educatori hanno un ruolo fondamentale nel processo di acquisizione del linguaggio emotivo e della sua gestione sia del piccolo sia del disabile adulto. È un lavoro quotidiano in cui si insegna al bambino a comprendere l’emozione che sta provando e si trova insieme il modo più funzionale per farvi fronte. Si impara, altresì, a riconoscere le emozioni nell’altro, sviluppando la capacità di mettersi nei suoi panni. Questo per evitare il rischio che diventi alessitimico.

L’alessitimia è l’incapacità di mentalizzare, percepire, riconoscere e descrivere verbalmente gli stati emotivi (propri o degli altri). È come una sorta di analfabetismo emozionale, cioè l’incapacità di tradurre le proprie emozioni in parole. L’incapacità di descrivere i propri sentimenti e di interpretare quelli degli altri è legata a tutta una serie di caratteristiche che si potrebbe ricondurre a una incapacità generale di introspezione. L’alessitimia è facilmente riscontrabile in alcune tipologie di disabilità. L’allenamento emotivo continuo, a cui il disabile è sottoposto nel periodo di permanenza al nido, gli permette di potenziare le capacità acquisite.

L’approccio educativo propone di elevare le emozioni da un livello di esperienza, strettamente legata alla percezione corporea, a un livello di rappresentazione concettuale in cui le emozioni possono essere oggetto di riflessione.

Attraverso il “fare utile” ed il “ fare insieme” l’educatore riesce a rafforzare le competenze proprie del disabile ed a instillarne di nuove.

6. Organizzazione del lavoro

È importante affrontare e definire le strategie di promozione del lavoro, dato che quest’ultimo si basa sulle sinergie tra azioni agite sia dai bimbi sia dai disabili e che si dipanano in tempi, situazioni e momenti educativi diversi.

Inoltre, date le peculiarità dello sviluppo dei bambini di 0-3 anni e per facilitare l’affermarsi delle competenze, è opportuno operare sul contesto educativo generale che si proporrà.

È fondamentale quindi che il progetto avvenga nella più completa serenità sia degli educatori di entrambe le strutture sia delle famiglie, in particolare quelle dei bambini, che devono sentirsi libere di poter scegliere se far partecipare o meno il proprio figlio al progetto, dopo aver avuto tutte le informazioni necessarie sui tempi, metodologie e personale che interagisce con i bambini.

Sono oltremodo importanti momenti di verifica a livelli differenti (fra educatori, fra educatori e famiglie, fra educatori, pedagogista e istituzioni committenti) in cui tutti i vari attori partecipanti al progetto possano confrontarsi.

Il progetto pioneristico nasce sei anni fa interessando una sola struttura, per il volere di Roberta Tomasso Responsabile dei Servizi in Struttura della Coop. Sociale Duepuntiacapo.

Attualmente questa sperimentazione si svolge in sei asili nido della provincia Nord Ovest milanese e coinvolge mediamente due sezioni per scuola di circa 15 bambini ciascuna. Ad ogni sezione è assegnato un gruppo variabile (dai cinque ai sette) di persone con disabilità cognitiva. Ogni gruppo di lavoro è monitorato e coordinato da cinque educatrici/educatori.

Questa tipologia di contaminazione educativa ha raccolto l’attenzione a livello territoriale ed è stata inserita in un “piano di zona” con l’idea di generare progetti inclusivi e di connessione.

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Stress and Emotional Management of MotoGP and Superbike Engineers and Pilots

Gestione dello stress e delle emozioni, nei piloti e negli ingegneri di MotoGP e SuperBike

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Abstract

Motorcycle competition is a sports/work environment that requires a high dose of concentration, of the ability to manage stress and emotions, apart from the necessary intense athletic preparation. This study analyzes how engineers and pilots manage stress and emotions prior to and during the world championship competitions of MotoGP and Superbike. 16 engineers and 16 pilots were subject to three types of tests in two different moments during the championship season in order to register their levels of stress and emotional expressions. Data analysis concentrated on identifying any correlations between amount of time the subjects were exposed to such stress and emotions, age of subject, the number of years subject has been active in such environment and, for just the pilots, the type of mental and physical training they did for season preparation. During the pre-championship phase, the levels of stress of both engineers and pilots are different, as the physical and mental work of the former continues, and for the latter the winter break brings them some relief from such stress. Once the championship season begins, such stress increases for engineers but not significantly, whereas for pilots, it appears they have an "off/on" switch which is turned to the "on" position in respect to the previous phase. The most interesting result of this analysis shows that athletes who undergo both a physical and mental preparation are capable of successfully managing the stress generated by the onset of the championship season.

Il motociclismo è un ambiente sportivo/lavorativo che richiede un'alta dose di concentrazione, gestione dello stress, delle emozioni oltre ad una intensa preparazione di tipo atletico. Lo studio ha esaminato come ingegneri di pista e piloti gestiscono lo stress e le emozioni, prima e durante i campionati mondiali di MotoGP e Superbike. A 16 ingegneri e a 16 piloti sono stati somministrati tre tipologie di test, in due momenti diversi del campionato, in modo da rilevarne i relativi livelli di stress e manifestazione delle emozioni. L'analisi dei dati si è incentrata sulla ricerca di eventuali correlazioni tra variabili indipendenti quali, tempo, età anagrafica, anni di attività nel settore, e per i soli piloti anche tipologia di allenamento, fisico e mentale. Durante la fase di pre campionato, i livelli di stress tra gli ingegnere e i piloti sono differente, a discapito dei primi che già lavorano mentalmente e fisicamente in ottica campionato, mentre i secondi hanno una fasi di alleggerimento durante la fase di riposo invernale. Diversamente invece avviene a campionato iniziato, dove il livello di stress degli ingegneri aumenta, ma non in maniera significativa, mentre quello dei piloti ha quasi una sorta di on/off, rispetto a quello rilevato nella precedente fase.
L'analisi sui dati ci fornisce il dato più interessante, mostrando che, gli atleti che affiancano alla propria preparazione fisica anche un allenamento di tipo mentale, riescono a gestire in maniera più efficacie lo stress generato dall'inizio della stagione motociclistica.

Keywords

Mental Training, Motor Sport, Stress, Emotion, Autoregulation

Allenamento Mentale, Sport Motori, Stress, Emozioni, Autoregolazione

The manuscript is the results of a joint work of the Authors to be attributed to: Introduction Napolitano. Par. 2 and 4 Rendina. Par. 3,5,6 Peluso Cassese.

Introduction

"Sports are an emotional experience for many athletes and the emotional state of an athlete can change the outcome of a race by influencing performance during practice and during competition" (Butler, 1996). This definition truly applies to the motorcycle racing world, where levels of attention and perception of a pilot can change his performance results.

The pilot, as also the engineer, are subject to different types of emotions; Lazarus defines them as "a phenomenon that is an organized psycho-physiological reaction to on-going relationships with the environment, most often but not always, interpersonal or social. Vallerand & Blanchard are also of this same train of thought and integrate Lazarus' assertion by going as far as to hypothesize that an individual's emotional state can influence motivation on both the physical and psychological levels.

Factors that can generate stress are multiple but if we consider them in the sports world, as per Janke (1976), they can be divided into five categories: stress of external origin; environment factors that can deprive our sensors ie: water, wind, caps, glasses, etc; stress from lack of primary needs, ie: scorching heat/freezing cold, time change/jet lag, change in diet; performance stress: excessive muscle tension or psychological pressure, doubts, negative experiences; social stress: relationship with loved ones, team members, coaches, parents, teachers; other sources of stress related to future plans or difficult decisions that must be taken.

A crucial point in the mental preparation of an athlete is his/her approach towards environment; this will always change based on athlete's level and type of performance, and he/she must pay close attention to his/her surroundings as this will be a positive or negative source and they must know how to manage it to obtain their best results.

Sports "activation" depends on this approach and from his/her level of preparation, and the lack of these could cause failure in performance.

Based on the approach employed by athletes, sport psychologists have produced over the years numerous theoretic models. Depending on the related activation and performance processes, various theories have been proposed, some of which have yet to be 100% confirmed, but we will nevertheless review them hereafter, along with the classical theories.

The majority of the studies were, for the most part, conducted using the upside down "U" method, proposed in 1959 by Easterbrook, who discovered a relationship between levels of attention and those of activation: at low levels of arousal, attention is focused on relevant and irrelevant information; at moderate levels of arousal, attention is focused only on relevant points, whilst at high levels of arousal, attention is limited only to a few relevant points but not all of them. Thus it is easy to understand how good performance can be achieved by an athlete whose activation level is moderate; the difficult part is to push the athlete to improve his/her arousal level to a higher one as each individual has their own means of approaching and managing external stimuli.

Within the performance/activation theories, we also find the Individual Zones of Optimal Functioning (IZOF), as per Hanin's theory in 1995. Initially this model concentrated on another element that influences performance - anxiety - which, if used at its ideal level, an athlete would be able to reach their so called "peak performance". A few years later, Hanin revised his theory to include positive/negative emotions and how these could also influence performance.

A combination of useful emotions was identified and defined with an idiographic approach for this model to determine their positive or negative impact, depending on the individual. This type of "customized" research on each athlete permits the identification of a greater range of emotions to determine their optimal level of attention without imposing a pre-formulated statistical model; it is at this point that a psychologist's role becomes important to help the athlete identify and determine their optimal performance state.

On the basis of positive emotions and their use to reach optimal performance, a new theory model called Flow, derived from studies by Mihály Csikszenmtihály, one of the leading exponents on Positive Psychology, has gained attention.

Flow is defined first and foremost as a state of consciousness in which the subject becomes totally absorbed by what he/she is doing, thereby blocking out all other thoughts and emotions. More than a moment of concentration, this is an experience in which mind and body are working together, out of context.

At first it is difficult to understand what Flow really is, but if you think about it and apply it in sports, like an "agonistic trance", it is much easier to understand. In auto racing, Formula One driver Ayrton Senna told of his "best experience" during the 1988 Monaco Grand Prix: "I was already in pole position and I kept going faster and faster... Suddenly I was almost two seconds faster than anyone else, including my teammate with the same car, and suddenly I realized that I was no longer driving the car consciously. I was driving it by a kind of instinct, only in a different dimension. It was as if I were in a tunnel ".

The "flow" represents the highest level of exploitation of emotions, of attention, and concentration, to be applied towards performance and learning during the race or match. During the "flow" state, attention is focused on the task, the athlete is not disturbed by his thoughts because he is completely absorbed by his activity and feels he can fully control his actions. The "flow" therefore becomes a stimulating moment because it produces better results, as well as pleasure in work and in sports. The results are better because both emotional intelligence and physical energies are activated.

This theory coincides with mental coaching, a method increasingly being used worldwide in sports to manage anxiety and emotions, and to focus on attention. This model could be defined as dual as it approaches both functions of physiological activation and cognitive strategies.

2. Methods

2.1. The participants

The study's participants were 16 riders, who regularly compete in top championships (average age 28.9 ± 4 years, riding time 14 years ± 4.5 years), and 16 engineers, who also work in the same championships (average age 39.6 ± 10.5 years, activity time 14.2 years ± 9.2 years). In addition, only pilots were asked whether they, apart from physical training, took part in mental training activities, such as coaching sessions or cognitive-specific workouts. All participants took the tests anonymously, without indicating name and/or surname, by simply indicating only a code to the data map. Each participant was explained the purpose of the study, and submitted informed consent in writing before testing began.

2.1.1 Protocol

The tests were conducted with specific timing: during the pre-season pause and during the third race of the World Championship for both participant groups and motorcycle championships, therefore in a test and retest outline. Three questionnaires, which have been validated worldwide, were used: the Perceived Stress Scale (PSS, Sheldon Cohen) specifically for the perceived stress analysis, and then with two others, the "Emotion Regulation Skills Questionnaire" (ERSQ, Berking and Znoj, 2008) and the "Self-Report Measures the Emotion Regulation Questionnaire" (ERQ, James J. Gross and Oliver P. John, 2003).

2.1.2 Perceived Stress Scale

The Perceived Stress Scale (PSS) is the most commonly used psychological tool for measuring stress perception and, based on the certain situations in one's life, measures the degree of stress. The scale also includes a series of direct questions on current stress levels and is designed for use on subjects having at least a junior high school education. In addition, the questions are of a general nature and are relatively lacking in specific content, so they can be used for any type

of context, group, or population, focusing primarily on feelings and thoughts perceived during the previous month.

2.1.3 Emotion Regulation Skills Questionnaire

The Emotion Regulation Skill Questionnaire (ERSQ) is a 27-question self-report that was developed by Berking and Znoj in 2008 to evaluate the adaptive capability of emotional control, referring to the ACE model (Adaptive Coping with Emotions Model).

The ACE model contemplates 9 dimensions / the ability to regulate emotions process:

(a) be aware of one's emotions

(b) identify and label emotions

(c) correctly interpret physical sensations related to emotions

(d) understand the emotional indications

(e) actively change negative emotions to feel better

(f) accept negative emotions when necessary

(g) tolerate negative emotions when they cannot be changed

(h) deal with or avoid negative emotions in uncomfortable situations in order to achieve important goals

(i) support oneself in emotionally distressing situations

All the above listed capabilities are assessed in the questionnaire through a Likert-type measurement scale, based on five points (at 0 = never, at 4 = almost always), and for a specific timeframe, that being the previous week. The nine dimensions listed above are all explored through a series of questions, such as "I paid attention to my feelings" (acknowledgement), "My physical sensations were a good indication of how I was feeling" (sensations), "I was clear about what emotions I was experiencing " (clarity)," I was aware of why I felt the way I felt "(understanding)," I accepted my emotions "(acceptance)," I felt I could cope with even intense negative feelings " (tolerance), "I did what I had planned, even if it made me feel uncomfortable or anxious" (willingness to deal with difficult situations), and "I was able to influence my negative feelings" (changed).

2.1.4 The Emotional Regulation Questionnaire

The "Self-report Measures Emotion Regulation Questionnaire" (ERQ), developed by James J. Gross and Oliver P. John in 2003, is based on the process of emotion control model launched by Gross (1998), which encompasses several different strategies to control them.

ERQ is designed to assess individual differences between cognitive assessment and suppressed expression. Cognitive re-evaluation is defined as an earlier cognitive strategy, from the time it occurs before a person is faced with a stressful situation and determines, above all, a change in emotional impact. On the other hand, suppressed expression is a response strategy that occurs when the person already finds themselves in a stressful situation, hence they already perceive an emotion, and therefore seek to block it.

The Emotion Regulation (ERQ) questionnaire is a 10-question test consisting of two scales which correspond to two different emotion-control strategies: six questions are related to a cognitive-type assessment (questions 1, 2, 3, 6, 9, 10) and the remaining 4 are related to the suppressed expression (item 4, 5, 7, 8). The questionnaire asks the subjects a few questions regarding one's emotional life and, particularly, how emotions are controlled. The 10 questions are evaluated on a Likert scale of seven points, where 1 means "strongly disagree" and 7 means "strongly agree".

3. Analisi statistica

To analyze the various tests, we first standardized them so that we could compare them and we used IT software to perform this task (IBM SPSS Statistics). We defined the time variable

with T0 = Phase “Before Season” and T1 = Phase “During Season”; then we calculated the relative dispersion indexes, and divided them according to each questionnaire, including the standard error, the detection of the minimum value and that of the maximum value, the asymmetry and the curtosis.

The study focused on many aspects, such as stress and emotion manifestation. From the questionnaire analysis, the test that provided significant value for consideration was that of the pilots’ stress exercises during the championship season (T1).

Paired Subjects Correlations – Pilots				
		N	Correlazione	Sign.
Coppia 1	PSS_T0 & PSS_T1	16	,670	,005
Coppia 2	ERQS _T0 & ERQS_ T1	16	,525	,037
Coppia 3	ERQ_T0 & ERQ_T1	16	,552	,027

Paired Subjects Correlations – Engineers				
		N	Correlazione	Sign.
Coppia 1	PSS_T0 & PSS_T1	16	,763	,001
Coppia 2	ERQS _T0 & ERQS_T1	16	,444	,085
Coppia 3	ERQ_T0 & ERQ_T1	16	,667	,005

Independent Subject Test										
F		Levene test for variances equality		/ Test t for mean equality						
		Sign.	T	gl	Sign. (a 2 code)	Diff. della media	Diff. errore std	Confidence Interval Range of 95%		
								Inf.	Sup.	
STRESS T1	Presumed Variations	1,698	,214	2,105	14	,054[a]	5,286	2,510	-,099	10,670
	Same Variations Not Presumed			1,986	9,581	,076	5,286	2,661	-,679	11,250
[a] *Significance close to 0.05, due to limited sample of pilots.										

All tests were evaluated by using independent t-test and Levene Test samples for variance equality.

4. Results

The data on conflict parameters are given in Table 1. For clarity, the magnitude of the different types of significant flaws are indicated only if less than 0.05.

4.1 Perceived Stress Scale

When the questionnaire was carried out, we noticed that the difference of the engineers' average data in the two surveys was minimal compared to the average data of pilots and we could therefore assume that, during the winter break, there is a decrease in stress perceived significantly for the pilots with respect to their engineers. We could also add that the "peak" of perceived stress by the pilot hits him just before performance, whilst the engineer has a fairly constant perceived level of stress between pre-championship development and during the championship season.

During analysis, we noted how emotional order has an asymmetric trend to the right, thus positive, and in a more pronounced manner for the pilots. We also found the presence of abnormal values, outliers, in both categories, and this can also be attributed to an incorrect data cleanup at the time of acquisition. Unfortunately, the fact of having a limited number of test subjects did not allow us to evaluate whether to take into consideration this data or ignore them.

4.2 Emotion Regulation Skills Questionnaire

When conducting the second test (ERSQ), we noticed that the mean scores tend to decrease with the onset of the championship; this leads us to say that there may be a slight lack of recognition and management of their own emotions. From the ERQS box plot shown, we noted that the emotional order has an asymmetric trend to the left, thus negative. Even in this case we find the presence of an abnormal value, but only for the pilots.

5. Discussion

The purpose of this study was to examine how stress and emotions are perceived at different times in the two motorcycle world championships. We took into consideration two different types of subjects - pilots and their engineers - in order to perform a comparative analysis of how different figures within the same environment responded to the same stress.

Initially, our goal was to verify a few hypotheses that could be related to individual subjects, to age, to experience gained in the field and over time, as well as see if there was some kind of correlation between pilot-engineer. Unfortunately, literature in this field is almost non-existent, so we went forward with a series of questionnaires that would allow us to gather as much data and viewpoints as possible.

By indirect observation and standardization of all scores, we tried to verify one by one our assumptions, starting with the analysis of data significance gathered from our questionnaires. Despite score variations obtained by cross-checking the questionnaires with independent variables such as age, experience, and time, no significant information could be identified to confirm any correlation, yet we still obtained indexes that can used for further in-depth analysis in some areas, such as the level of stress perceived in relation to the time accumulated in the environment.

Contrary to common thinking, the hypothesis on possible correlation between experience, emotion, and stress – for both pilots and engineers - is proved otherwise as there is no link that identifies a relationship between these variables. There is an increase of stress perceived by both subjects, but not significant enough to prove the hypothesis. The same issue is also shows in the tests on skills and on emotion manifestation: there are variations, directly or inversely proportional but not significant enough to permit us to prove the hypothesis.

6. Conclusion

We must begin with the assumption that from all these data collected, one must bear in mind that the context of normality of allocation and the homogeneity of variance are violated. This may depend on several factors, but for our study, it is mainly due to the small number of participants.

Certainly, the biggest difference of the two surveys conducted is that the engineers' mean is minimal when compared to that of the pilots, hence we can assume that during the winter break, there is a drop in significant perceived stress for the pilots compared to their engineers. We could also add that the "peak" of perceived stress by the pilot hits him just before performance, whilst the engineer has a fairly constant perceived level of stress between pre-championship development and during the championship season.

Moving on to the second test (ERSQ), we can see how the mean scores tend to decrease with the onset of the championship season, as if there was a slight lack of recognition and management of their own emotions. A further analysis could be carried out from this test which would break up the questions into 9 clusters, and analyze what Gross-defined dimensions changed most between the winter break phase and the onset of the championship season.

In closing with the ERSQ, we can see that the mean scores between Pilots and Engineers vary, with emotion manifestation in pilots decreasing on average, whilst it increases in engineers. This data may suggest that there is a tendency for pilots to control their emotional manifestations and that their engineers do not.

However, an "almost significant" data was found in the analysis of the Stress_T1 variable regarding Mental Training. This significant data is almost certainly due to the limited number of pilots involved, but we can assume that said training does indeed affect the pilots' perceived stress during the championship season.

For sure, the population is not numerous, but the study can be considered representative, and allow us to obtain some indications on which direction to move forward and what variables to focus our studies on, even if bonafide conclusions cannot be made. Perhaps furthering research on what types of mental training are used and in what way, rather than whether stress and emotions based on pilot rankings vary.

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Il Work Ability Index come strumento di Educazione alla Salute

Work Ability Index, a tool of Health Education

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Abstract

The aim of this study is to highlight the value of the Work Ability Index (WAI) as a health education tool, especially for the age group 18 to 65 years. Public and private organizations can play a decisive role in spreading the culture of prevention and care of their mental and physical well-being. The Work Ability Index measures the working ability of people employed in public and private facilities, exploring external and internal areas of the individual. Work ability considers a number of factors, within which the mental and physical conditions in which the worker performs their activity, play a primary role in determining their degree of adaptation to the work itself. Maintaining good working skills is related to good working conditions and personal health, which are backed up by an active personal life-style. This translates into a better quality of life and greater productivity. In this sense, demonstrating that good health and environmental conditions increase productivity and quality of work, it can push public and private organizations to promote programs to disseminate a health culture. The study looks at the results of various national and international research on the instrument.

Lo scopo di questo studio è evidenziare la valenza del Work Ability Index (WAI) come strumento di educazione alla salute, soprattutto per la fascia di età dai 18 ai 65 anni. Le organizzazioni pubbliche e private possono avere un ruolo determinante nella diffusione della cultura della prevenzione e cura del proprio benessere psico-fisico. Il Work Ability Index misura l'abilità lavorativa delle persone impiegate in strutture pubbliche e private, esplorando aree esterne e interne all'individuo. La capacità di lavoro deriva da numerosi fattori, all'interno dei quali, le condizioni psico-fisiche in cui il lavoratore svolge la propria attività rivestono un ruolo di primaria importanza nel determinare il suo grado di adattamento al lavoro stesso. Il mantenimento di una buona capacità di lavoro è in relazione con buone condizioni d'impiego e di salute, le quali sono, a loro volta, sostenute da stili di vita personali attivi. Ciò si traduce in una migliore qualità della vita e in una maggiore produttività. In questo senso, dimostrare che buone condizioni di salute e ambientali aumentano la produttività e qualità lavorativa, può spingere le organizzazioni pubbliche e private a promuovere programmi di diffusione di una cultura della salute. Lo studio prende in esame i risultati di diverse ricerche che in ambito nazionale e internazionale sullo strumento.

Keywords

Work Ability Index, Health Education, Physical Activity, Well-being, Life-style

Work Ability Index, Educazione alla Salute, Attività Fisica, Benessere, Stile di vita

The manuscript is the results of a joint work of the Authors to be attributed to: Introduction Ascione. Par 1,2 Mariani. Par. 3, 4 Peluso Cassese.

Introduction

One of the strategic goals of "Health 2020" international project, promoted by the World Health Organization (WHO), says that governments need to work together to improve the health of all citizens and to reduce inequalities. Health promotion goes through the diffusion of a culture of a proper lifestyle, in terms of nutrition, physical movement, consumption of harmful substances (Ministero della Salute, 2015). Furthermore, it is important to consider that Eurostat demographic projections (2011) indicate that the ratio of inactive elderly people and working age people (between 15 and 65), in the twenty-two European countries analyzed, will pass from 23.7 per cent average of 2011 to 50.2 percent in 2050. In Italy, in 2011, the ratio between inactive and working people was 32 percent, the highest among the analyzed European countries. The competitiveness of the European Union over the coming decades will depend on the contribution of its older workers, especially by comparing it with North America and Asia. If we consider that having a proper lifestyle benefits, both the health of individuals and their performance in the labor and social areas, this highlights how it is strategic and important to involve public and private economic organizations in educational programs to health. This could be possible linking psycho-physical wellness programs within the organization to quality of work and productivity. Moreover, it is important to consider that such public and private structures generally employ individuals between the ages of 18 and 65, a population that is difficult to reach systematically from other institutions. In this context, it is crucial to identify simple ways of monitoring the working ability of the population. The Work Ability Index, a tool developed by the Finnish Institute of Occupational Health (FIOH) (Tuomi et al., 1998), relates the lifestyle and health of workers with their work skills. The underlying principle of the instrument is that the maintenance of good working skills is related to good working conditions and health, which in turn is supported by satisfactory working conditions (environmental and relational) and from personalized lifestyles. This leads to a better quality of life and greater productivity at work. In this concept, the adoption of the WAI as a tool to diagnose the degree of work ability of the organization can bring companies to develop programs focused on the spread of proper and active lifestyles, considering that healthy employees work harder and better.

Work Ability Index

The Finnish Institute of Occupational Healt (FIOH) has developed a tool called "Work Ability Index (WAI)" (Tuomi et al., 1998). The assumption in the development of this tool is that the maintenance of good working skills is related to good working conditions and health, which, in turn, is supported by satisfactory working conditions (environmental and relational) and by personal lifestyles. This leads to a better quality of life and greater productivity. The Work Ability Index can be defined as the degree of compatibility between work demands and individual resources (Ilmarinen e al., 2004). Work ability derives from a number of factors and the conditions in which the worker performs his activity play a primary role in determining his degree of adaptation to the work itself. The worker contributes to his / her work ability through psycho-physical health, functional abilities, knowledge, skills and motivation. The workplace affects the worker's work ability through organizational factors of work, in particular management and leadership, such as job demands and the working environment, including social aspects. Indeed, in addition to physical factors, psychosocial aspects may also have negative effects, through the potential stress generated by exposed individuals. Stress can also negatively affect motivation levels, with significant organizational implications such as rising absenteeism and turnover rates and lowering productivity. It has important repercussions on work ability, as it reduces the chances of adapting individuals to work demands. Ilmarinen and Tuomi (2004) represent the concept of Work Ability as a building (see Figure 1), the basis of which is the

worker's health, which is the foundation of work ability. The first floor contains the social and professional skills needed to support work demands and more and more important at a time, such as the present one, where changes in the workplace are normal. On the second floor, they lay the motivation and values of the person. In this plan, respect, esteem and sense of justice play an important role in engaging in organization, motivation and commitment. These values influence skills and motivation for learning and improvement (the underlying plan). The last floor contains all aspects of work (physical, psychological and social demands), the environment and the organization of work. Here, leadership has a fundamental influence, but also other work factors such as the possibility of development and decision-making in the work. Around the building, very close, there are the family, social and private aspects of the worker who also have an impact on the work ability.

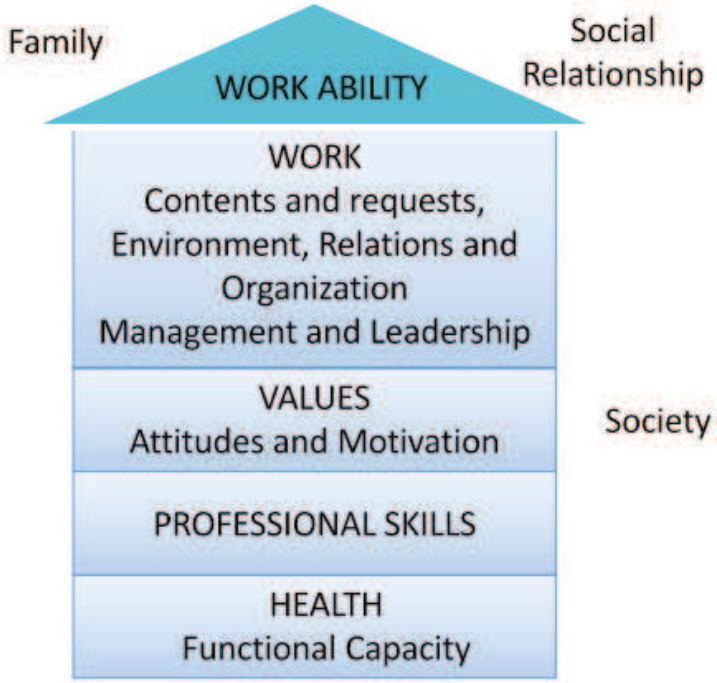

Figure 1 – "Work Ability" House

In addition, the building has a single roof that is the work ability that combines all the aspects mentioned above, which are essential for maintaining and promoting work ability in the organization. All floors must be in balance, one with each other. If the work ability index is low in a person or group, it is important to consider all four aspects. In a work organization that promotes health and safety, it is useful to apply such a model already in the preventive field, considering a holistic view of the organization and ensuring a good communication flow between the various plans by mobilizing internal and external resources, if necessary. The WAI, or Work Ability Index, is calculated based on the answers given by the worker to a series of questions that take into account both the physical and mental demands of the job, the health status and the worker's resources. It is very important how the subject evaluates his / her work ability, as this affects the way he or she will deal with work issues. This tool can have different uses within organizations. Mainly, the WAI can help you in the following activities:

• estimating the organization's current and future potential in terms of workforce;
• identification of risks at individual and group level at a pre-emptive stage;
• definition of preventative action at individual or group level or entire organization;
• measuring the effects of any interventions.

These functions can be developed on different levels: single worker, workgroup or whole structure. This tool can be a valuable help to organizations that are concerned with employee health and the productivity of their organization, especially in the long term. It takes into account some aspects of the lifestyle of the worker that are crucial to the health of the subject and which have important influences on the physical, psychological and even in terms of work productivity

2.1 The questionnaire

The questionnaire consists of a first part with personal and general information and a part related to questions regarding physical and psychological aspects. The questions are related to seven dimensions that make up the Work Ability Index, and they are:
• current level of working ability in relation to the highest level;
• current level of working ability in relation to requests;
• current illnesses diagnosed by a physician;
• illness effects at work;
• absences due to illness;
• estimation of work ability in the following two years;
• mental resources.

There is then a last part, which does not fall into the final score calculation, which concerns the different types of impediments that their condition implies.

The answers to the questionnaire give a score that can range from 7 to 49. A score of 49 points indicates the highest level of work ability, while a seven-point score indicates a low level of work ability. Individual work ability can be classified into four categories: low (7 to 27 points), moderate (28 to 36 points), good (37 to 43 points) and excellent (44 to 49 points). A low level of working capacity means that job demands and worker resources are not balanced; this may be due to poor working conditions or limitations in worker's condition, or both.

2.2 Results reading and possible actions

In their book, Rautio and Michelsen (2014) recommend some actions and preventive measures to be implemented depending on the results obtained in the Work Ability Index, hoping to work closely with supervisors in the workplace and the responsible for public and private health services. With an excellent WAI score (44 to 49 points), the authors state that it is important to maintain the health and well-being of workers by ensuring that working conditions are optimal, that the organization supports work processes, skills and the employee's work activities develop naturally and that workplace conditions favor healthy choices and habits (eg, the possibility of eating healthy meals) and the adoption of optimal working methods. If the WAI result is good (from 37 to 43 points), they suggest that you take the actions and abilities described above for the previous level so that you can increase the well-being and health of workers. It is also essential that any Work Ability Decrease Risk Signs be immediately intercepted and act with support and interventions.

For workers where the WAI result is moderate (from 28 to 36 points), the organization should act to restore a good level of work ability through specific training and support and mod-

ifying working conditions by continuously monitoring the situation and periodically providing the employees with the questionnaire. In organizations, however, where Work Ability is low (7 to 27), close collaboration between employer and health services is strongly recommended in order to restore an acceptable Work Ability level. Targeted actions are required in cooperation between work organization and medical specialists in the sector, with rehabilitation interventions, specific training, psychological support and whatever is needed. Additionally, continuous employee status monitoring is required with low WAI in order to make the changes or adjustments required for the defined program.

2.3 Studies on Work Ability Index

The reliability of WAI has been tested by De Zwart et al. (2002) using a test-retest method, with a four-week interval between measurements, by submitting the questionnaire to ninety-seven building workers from the age of 40. The method has shown that the WAI has an acceptable level of confidence in the classification of worker's work ability. At group level, the instrument confirmed the stability of the four-week distance measurements. In some studies conducted on a variety of professional groups, it has been shown that elements such as age, obesity, lack of physical activity during leisure time, low musculoskeletal function, high mental demands, lack of autonomy and high physical workload, all have a negative impact on the Work Ability Index level (Van Den Berg et al., 2009). Sartori and al. (2007) conducted a cross-study on non-medical healthcare professionals in seven hospitals in Mantova, delivering the WAI along with other tools. The study found that WAI has been sensitive to identifying changes in work ability in relation to sex and age. Women generally show a significantly lower Work Ability Index than men, with a gradual decrease in the index in relation to the rise in age, among women. However, there were no significant differences in the decrease in the age-related WAI index, between different qualifications, between different work areas and type of working time.

Some researchers have focused on the predictive value of the WAI tool. Tuomi (1997) conducted a longitudinal study on Helsinki City Workers focusing on aging and demonstrated that the Work Ability Index was able to predict the incidence of incapacity for work in 50-year-old workers. Approximately two-thirds of the workers who had a low work ability index received a disability annuity within the next eleven years. Those who obtained a low index but had the chance to continue working in the same activity has been able to improve their work ability through adequate organizational and rehabilitative support for a third. Other studies have shown that a low or decreasing level of the Work Ability Index increases the likelihood of prolonged absence for disability (Alavinia et al., 2009) and disease (Kujala et al., 2006) and early retirement (Salonen et al., 2003) but also premature death (Tuomi et al., 1997). According to the study of Tuomi et al. (2001), good work skills are significantly correlated with high quality and high productivity in their work. The comparison between the group with an excellent level of work ability and the group with a low level of work ability results in a high quality work and high productivity >1.5-fold more common among the former. Besides, the corresponding figures for high quality of work alone and high productivity alone were >1.9-fold and >1.3-fold, respectively. Younger age, better perceived general health and higher beliefs of pain self- efficacy were associated with higher work ability. Younger age, higher beliefs of pain self-efficacy, lower physical work demand category and having a part-time job were associated with higher work performance (Haitze et al, 2013). Chung et al (2015) found out that work ability had a positive correlation with cognitive function, but there was no significant correlation between work ability and age or number of years of service. Several studies have shown that people with a high work ability index have a lower risk of premature labor outbreak and higher quality of life even after retirement (Ilmarinen et al., 2004). The same studies have also shown that if the right actions are taken, it is possible to increase the labor capacity index, even in advanced age.

3. Conclusions

The results of the above studies show that Work Ability Index has a good correlation with psyco-phisical condition and with productivity and work performance. In this way, WAI could be a meaningful tool to be used by companies to assess their workers' work ability and, consequently, to act to restore a good level of performance and productivity, if necessary. If private companies will involve themselves in health program for their workers, they will actively contribute to health promotion and inequalities reduction, as stated by OMS. It is important to produce more studies that correlate the work ability index with performance and labor productivity, in order to strengthen the companies' conviction of investing in wellness and health programs for workers.

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Between Sport and Education. Pedagogical reflections about the *Dual Career of Athletes*

Tra Sport ed Educazione. Riflessioni pedagogiche sulla *Dual Career degli atleti*

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Abstract

The *Dual Career of Athletes* represents a chance for élite athletes involved in higher education too, from school to University, to be able to successfully combine excellence in sport with higher education, with the intent to prevent school and university drop-out, increasing the number of university graduates, as well as the rise of the European employability rate, things at the basis of the European 2020 Strategy. Under investigation are the institutions that organize and govern sport and education, because it seems useless to talk about a fruitful integration between sport and education where the skills developed in the first are not seen as value and resource in the second, and vice versa. Even if Italy has witnessed a rapid spread of research projects and guidelines about the *Dual Career of Athletes*, which have spread an increasing recognition of sport in school and university, pedagogy critically contributes in suggesting guidance as a tool of harmonious integration between sport and education that, first of all, concerns the subject's identity as athlete and as student.

La *Dual Career of Athletes* rappresenta una possibilità per gli atleti di élite che sono impegnati anche nei percorsi di formazione formale, dalla scuola all'università, di riuscire a conciliare con successo il percorso sportivo di eccellenza con quello formativo di tipo formalizzato, con l'intento di prevenire il *drop-out* scolastico ed universitario, l'aumento del numero di laureati, nonché l'innalzamento dei tassi di *employability* europei, obiettivi questi alla base della strategia Europa 2020. Sotto inchiesta, allora, sono le istituzioni che organizzano e regolano i percorsi sportivi e quelli d'istruzione, alla luce del fatto che sembrerebbe inutile parlare di una proficua integrazione tra sport e formazione laddove le competenze maturate nel primo non passino come un valore e una risorsa nella seconda, e viceversa. Seppur anche in Italia si sia assistito ad una rapida diffusione di progetti di ricerca e linee guida sulla doppia carriera che vanno in direzione di un sempre maggiore riconoscimento dello sport nei contesti d'istruzione, la pedagogia apporta un contributo critico su questa tematica, proponendo la diffusione di percorsi di orientamento che siano a sostegno di una integrazione armonica tra sport e formazione e che, innanzitutto, interessa la dimensione identitaria del soggetto, come atleta e come studente.

Keywords

Dual Career of Athletes, Sport, Drop-Out, Higher Education, Guidance

Dual Career degli Atleti, Sport, Drop-Out, Alta Formazione, Guida

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1. Introduction

In recent decades many intervention strategies have been developed, which the most important international governmental organizations promote in favor of an organic development of sports and physical activities on a global scale. As regards high-level sport, the European Commission has long focused on its promotion in formal learning contexts; as the Lisbon European Treaty has established, for example, requiring member countries to increase the practice of physical activities and sports to promote a "healthy" European development (European Commission, 2009). The strong interest in sports and physical activities in formal learning contexts, mainly at school, was due to a twofold motivation: if, on the one hand, these are recognized as curricular activities in every respect and at the same level of the other study disciplines, on the other hand, the teaching practice (and more generally the common sense) yet poorly tend to recognize them of equal dignity to others, like a real educational device in the formal context (Bellantonio, 2016), thanks not only to the pervasive mind/body dichotomy that still widespread in the learning/teaching contexts, but also to the small number of hours that school dedicates specifically to these activities (EACEA, 2013). A rather widespread cultural perspective, in fact, which still inspires the formal training process, keeps considering the activities related to the body, movement and sport, as a minority compared to other domains of knowledge, the result of interpretive positions that, over time, have embraced the relationship between education and body (Cunti, 2015, 2016a; Galimberti, 1987; Isidori, Fraile, 2008; Sarsini, 2005), confining these activities on the sidelines of the educational programming.

According to a vision of *lifelong*, *life-wide* and *life-deep* learning, namely permanent, pervasive and profound learning, the European Commission has shown a keen interest in the theme of the *Dual Career of Athletes*, a chance for athletes engaged in formal training, from school to University, to be able to successfully combine the sports excellence path with that of formalized training type; from this perspective, knowledge and skills gained within the sports context do not exclusively concern that field, rather they represent a "toolbox" employable in all other realms of existence, at least in the light of the fact that any form of knowledge is constructed by means of a relationship of co-adaptation to the environment (Bateson, 1976/1949), in an explicit or latent way (Bruner, 1992/1991), by contributing significantly to a global, holistic and not limited subject's education. So in the context of formal education the subject can only be considered in all his complexity and uniqueness, the result of the experience gained in the various learning contexts, even those sporting ones, unlike a didactic traditionalism that, yet today, tends to emphasize the too intellectual and verbal components, which contrasts sharply with a constructivist view of knowledge, and that has been widely recognized, from a scientific perspective, at pedagogical and educational level (Cunti, 2014). Teaching practices focused on the acquisition, retention and repetition of contents, at the expense of comprehensive and holistic phenomena (Cunti, 2008, 2014), do not favor a desirable decompartmentalisation of knowledge (Gardner, 1991a/ 1983/1989, 1991b; Morin, 1993/1991) as well as a knowledge of self as corporeality, as mind/body inseparable unit; so under investigation are the institutions and educational systems that organize and regulate sports and educational paths, in light of the fact that it seems pointless to mention a profitable integration between sport and education, where the skills acquired in the first are not seen as a value and as an asset in the latter, and vice versa.

2. The Reasons Behind the *Dual Career of Athletes* in Europe

On the political front, it was in 2012 that the European Commission published the guidelines on the dual careers for athletes, underlining mainly the legal recognition of the status of "student-athlete" (European Commission, 2012) as the first decisive step towards the legitimate approval of a category of students requiring special psycho-educational attention, especially in light of the fact that in Europe, even today, there is a political, legal and educational effective integration between the

educational system and that sports one (Bastianon, 2014). This problem, in addition to concerning the operational plan, in mainly related to that of a real sharing of intents, to the way education considers sport and the way the latter considers education (Cunti, 2010); therefore, it is about promoting a genuine recognition of the subject's education from both parties called into question.

Unlike some extra-European countries, like the United States for example, where sport is an integral part of formal training paths – it is enough to refer to the high percentage of athletes in the students' population (Shulman and Bowen, 2001) and to the consideration of current or former athletes' sports curricula as privileged criterion for admission to undergraduate courses (Bowen & Levin, 2003), in terms of formal education, as well as the organization of sports calendar that promote competition in times of the year that allow athletes to combine sport with the academic path (ibid.), in terms of sport – in Europe, to date, it is hard to recognize high-level sport within these contexts (Guidotti & Capranica, 2013). In fact, the integration of these areas of education as an integral and inseparable part of the athlete's growth path, being him a subject, concerns both contexts; if, in the sports context, formal training is not seen as something positive but as an activity that distracts the young from concentrating on his tasks, in that of education, training activities are often considered minus and does not allow students/athletes attending school or university as they would. Furthermore, as pointed out in some research contributions (Simons *et al.*, 2007), there are frequent prejudices that teachers and students have towards athletes who are engaged in formal training, who have little confidence in their ability to efficiently mix the two careers, contributing significantly to a drop-out and increasing social stigma related to the fact that those who carry out high-level sport paths – as well as artistic or music ones, for example – are not able to develop properly in other domains of knowledge, as if the increase in the degree of skill and knowledge held on one of the two sides matches with a certain decrease in the other; more specifically in sports context, in other words, students who are simultaneously also athletes are downgraded to a lower level than those focusing exclusively on a cultural education, understood in the traditional sense.

For these reasons, the European Commission has just questioned on the needs and opportunities for those who hardly mix high-level sports activity and study, and that, in some cases, end up favoring the sports career at the expense of the educational one, proving to be unable to reconcile the too much time for practicing sport with the too little time for studying; it follows that, if some people decide to engage themselves almost entirely in the excellence sports career, thus increasing significantly the phenomenon of school and university *drop-out* (Conzelmann & Nagel, 2003) and exacerbating the issue of end-of-sporting-career professional retraining (Park, Lavallee & Tod, 2012), others tend to continue their training path, thus abandoning the sports one (Amara, Aquilina, Henry, 2004; Aquilina, 2013). However, the phenomenon of sport drop-out has some peculiarities, which concern some specific factors of the sports practiced, such as their typology, the characteristics of competitions, the economic and material resources around them, elements that influence significantly the adaptive management of the subject to the dual career path (López de Subijana *et al*., 2014); at this point, it is very likely that such conditions may push the subject to dropping out his educational career (Álvarez & López, 2012, Selva, Pallarès & González, 2013), as well as the sports one, which requires a particular attention to educational and sports systems so to try to stem the emerging criticalities. As observed by some experts (Guidotti & Capranica, 2013), although Europe is aiming at reducing the phenomenon of school, university and sport drop-out, still today among the national policies on promoting dual career paths there are considerable discrepancies; if some countries tend to have direct and centralized control over the double career paths, others leave the subject the burden/honor to best and autonomously mix the planning and integration of study and training sessions (Aquilina & Henry, 2010), with the risk of becoming a sort of organizational *burn-out*.

Therefore, it is very important to deal with this issue with a multi-perspective approach, with the awareness that, as detected from some research data, the factors that determine a positive adaptation of the subject to professional path and dual career path refer to both *internal factors*, such as personal resources, Self-Esteem, motivation and Self-Efficacy, both to *external*

factors, such as social support obtained within the family, at school and in sports environments (2007 Alfermann & Stambulova; Guidotti *et al.*, 2014; Lenténé & Perényi, 2015); this concerns very closely the way in which students/athletes deal with the problems and the way in which the contexts of experience support it, which, in the first instance requires an education to the development of these strategies in sports that puts the subject, in his entirety, at the center of the educational process (Bellantonio, 2014). From this perspective, a sharing of attempts from social systems called into question – among which there are family, school, university and sports governing bodies – is necessary so to renew a rather stigmatized view of the athlete; in such sense, it emerges that the programs of double career need, from the one hand, a cooperation between the world of education and that of sport, in order to achieve a common objective – the education of the athlete as a subject – and, from the other hand, an involvement of the families of the athletes in the goals and purpose of these programs. The idea underlying this perspective is that to consider the subject according to a lifespan approach; in other words, the sports career is not understood as an existential trajectory extirpated from the others fields of the existence, but rather as a process that becomes part in that integral of total development. The many processes of growth, structuring and re-configuration of identities also include the kind of sport, made up of existential transitions that go hand in hand with the more typically transition processes towards adulthood (Hauser, Bowlds, 1990), during which subjects change some salient aspects of their identity, as well as social bonds and relationships (Bronfenbrenner, 1986/1979, Elder, 1985).

From what we have claimed, it is possible to fully understand the urgent need for drawing up European Guidelines to guide Member States towards greater awareness on this issue, in order to implement those joint action strategies that can generate organizational prerequisites useful for spreading dual career paths for athletes (European Commission, 2012). For these reasons, the European Guidelines emphasize, first and foremost, the role played by the various institutional bodies in promoting effective double-career programs, and identify areas of intervention on which to work to achieve the objectives; in that sense, therefore, the European Commission declares its commitment to supporting cooperation between the governing bodies involved, both through monitoring and evaluating the processes in place and through economic incentives for athletes mobility programs.

Ultimately, it is through a networking that athletes can be given the chance to combine sports career with study/work without unreasonable efforts and in a flexible way, so as not to compromise the goals of the sports and educational career; it is in connection to what we have reported that the concept of dual career in sports becomes part of the broader framework for achieving the objectives of the Europe 2020 Strategy, such as the prevention of school and university *drop-out*, the increasing number of graduates, and the rise in European *employability* rates.

3. *Dual Career of Athletes* Projects in Italy: Research and Intervention Dimensions

As discussed in the Treaty on the Functioning of the European Union (TFEU), youth, education, vocational training and sport are listed among the areas of intervention in which Europe needs to urgently take measures, in order to coordinate and complete the actions taken by Member States (Bastianon, 2014); in line with this and with reference to the guidelines issued in 2012, there are many research and intervention projects that, also in Italy, are concerned with the theme of the Dual Career of Athletes.

In the field of the research, there are no significant studies in Italy that deepen the theme of the Dual Career of Athletes at school; starting from this assumption, the University of Rome "Foro Italico" has been trying to develop a pedagogical model useful for the implementation of effective educational interventions at school through a systemic approach (Migliorati, Maulini, Isidori, 2016), which will be followed by an assessment of the degree of validity through evi-

dence-based methodologies. However, even though there are still no *ad hoc* conventions among sports organizations, training and education systems and the world of work, a decisive turning point has to be considered the establishment of the Sports High Schools, as well as Law 107/2015, the so-called "Buona Scuola", which also opened the possibility of launching protocols between school institutions and sports associations, for the development of effective double career paths for athletes in Upper Secondary School; in sports schools, in fact, in addition to a substantial increase in the hours spent in physical education, some traditional disciplines are replaced by other more relevant to physical education and sports activities, thus promoting the inclusion of students/athletes (Salisci, 2016).

In the field of University, the European Parliament has implemented, for the three-year period 2015-2017, the research project called "Developing an Innovative European Sport Tutorship Model for the Dual Career of Athletes" (ESTPORT, 2017) in the field of the Erasmus+ Project of which Italy is part too, in order to promote and support the practice of sports through the development of dual careers for athletes according to a pedagogical guidance tutorship. The project involves the *University Católica San Antonio of Murcia* (Spain), the *University of Thessaly* (Greece), the *University of Malta* (Republic of Malta), *Trinity University of Leeds* (United Kingdom), *Europa Community Ltd.* (United Kingdom) and, for what concerns Italy, the University of Rome *"Foro Italico"*. With the primary aim of designing guidance strategies for students/athletes based on evidence-based research methodology, it was decided to draw up and validate a questionnaire on the perceptions that high-level students/athletes have about their double career path, in order to obtain a valid questionnaire useful for dealing with the criticalities expressed by many professional athletes or potential athletes, just in conciliating double career paths (Sánchez-Pato *et al*., 2016).

In the field of school, in accordance with art. n.1, paragraph n.7 of Law 107 of 2015, the M.D 935/2015 on "high-level Student-Athlete didactic Experimentation" was issued, which provided for an experimental innovative school educational program for high-level students/athletes attending upper Secondary Schools (MIUR, 2015); the program promoted by the MIUR (Ministry of Education, University and Research), in collaboration with the CONI (Italian National Olympic Committee), the A Series League of FIGC (Italian Football Federation) and the CIP (Italian Paralympic Committee), involves currently more than 400 students in 17 Italian regions and represents a first important step towards the actual recognition of student/athlete *status* in the school, and with which traditional didactics have to start dealing.

As for the contribution from the management and high-level sports dissemination bodies in Italy, the CONI' Sport School has been the territorial partner of the European project GEES (Gold in Education and Elite Sport), which involved about ten thousand athletes by supporting them in career paths; more specifically, the goal of the project was to define the skills needed for the development of a successful double career, in order to provide responses to the needs of students/athletes, even by actors actively involved in the sports field. The project is an opportunity to provide students/athletes with the best training support for a successful double career (De Brandt, Wylleman, Defruyt, Taelman, 2016), which confirmed the need for a holistic approach to issues related to the *Dual Career of Athletes* (Wylleman, Reints & De Knop, 2013), taking into account both the psychological processes involved (MacNamara & Collins, 2010) and the natural existential drives aiming at a change and that see the subject as the active protagonist of his wide-ranging life choices and plans.

The activities reported in this contribution, though not being able to report the quality of the actions expressed in terms of dual careers, at least in the light of the fact that some of the research and actions are still being tested, represent a significant insight into what happens in Italy and show the fact that, still today, it is necessary to keep promoting a change in the cultural direction on the political, social, educational-training and sports field according to a systemic perspective; the pedagogical challenge is then to change the stated intentions into authentic operative planning, where it seems that a reform of thought about the contribution that training can make to the subject's wellbeing in his entirety, and along his evolutionary and emancipation path, is necessary.

4. Between Sport and Education: Pedagogical Considerations "On the Margins"

Even though the actions of the political, educational, training and sports systems in the field of dual career are to be considered as a first decisive step towards a genuine recognition of sport in the context of education, and not only, it seems appropriate to make some pedagogical considerations on the margins that can improve these practices, and that help them somehow reflect on what is being done and can still be hopefully done in this area.

A fundamental reflection from which to start refers to the fact that, very often, sports context is preferred as an area of life and interest, sometimes exclusively, to the expense of other contexts of experience, such as school/university and vice versa, and this may have very strong influences on the process of structuring and consolidating students/athletes in the adolescent phase and in their transition to adulthood; to that effect, in fact, recognizing oneself and being socially recognized first as adolescents/young adults, rather than as athletes, seems to be the main educational point from which to start, and that concerns the identity construction. While it is true that, during adolescence, the identity of student is the one recognized to a greater extent at social level (Pietropolli-Charmet, 1991), as is the case of identity of worker during adulthood, then, in order not to feed on further criticalities, it is useful to support the entire athlete's path of growth at educational level, and to make it easier for adults to transit into adulthood; in this sense, the athlete who is approaching this step of his cycle of life – in having to make choices that could cause him to leave his sports activities, for example seeking a job, as well as dropping out the formal training path, giving up his career as a sportsman – could find himself faced with a real *identity crisis* (Erikson 2000/1968), since he hasn't had the chance to experience, in a joint and articulated way, rather diversified forms of his existence that can cause him to re-think himself constantly. Consider, in this regard, the young promising athletes who are involved in early specialization sport, where the phase of the so-called refinement, which is the most delicate in terms of performance, tends just to match with the phase of transition to full adolescence, a situation that goes hand in hand with the more typical transition phases of this age; it follows that, being him not able to handle the complexity of these developmental tasks, it reminder the subject to have a defeatist attitude with respect to what he is and what he will be, making choices which can privilege some of them rather than others.

It is well understood that, at this point, the issue should not concern the specific moment of transition – the moment in which a subject wonders about what it is like to be not athlete anymore and what skills have been developed over time, in addition to the sport-related ones – but it covers the subject's whole path of growth; in this sense, if an individual is "educated" somehow to be an athlete and also a student, without a dimension prevailing over the other, then the existential transitions in sport can become beautiful moments of experimentation of Self. A "positive" viewpoint change, in this sense, allows the subject expressing himself with greater degrees of freedom, making diversified experiences and guiding towards the future. For this reason, the guidance function of education becomes an essential quality at the foundations of training in the sports field (Cunti, 2016b); as emphasized by some research contributions (Sapp & Haubenstricker, 1978), in fact, the reason that pushes subjects to abandon sports activity in the late adolescent period is related to the desire to start engaging in other activities, among which the search for a job position is prevalent; the same longevity in sports practice could be then fostered by the proactive function that the orientation could play in the sports field, thus limiting the phenomenon of drop-out.

Ultimately, the perspective at which to aim is a *guidance towards education* and a *education towards guidance* in order to implement effective programs of the *Dual Career of Athletes*, which requires a radical change in the approach that has historically marked the sport-education duo in Italy, and not only. From lifelong learning perspective, hostilities still deeply rooted in the harmonious integration between sport and formal education/formation require a radical process of change in the functions and relationships between formal educational/formative systems and sports, in a systemic perspective, where guidance represents a quality of education to be put in the foreground.

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Musictherapy: music as a tool of healing

Musicoterapia: la Musica come strumento di cura

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Abstract

Musictherapy is a therapy that uses music, rhythm, sound and melody in certain circumstances of disease or disability, in order to facilitate and improve social, communicative and relational aspects. This kind of technique is part of the broad group of expressive therapies that use emotions, feelings and perceptions for therapeutic purposes as a form of communication and relationships with others. Through the therapeutic use of music it is possible to work on physical, psychological and sensory dimensions, facilitate social experiences and develop a greater awareness of one's own abilities. Musictherapy is characterized as a preventive, therapeutic, and rehabilitative intervention, its purpose is to support the development and evolution of aspects related to motor skills, emotions, language and sociability. Communication through a sound and/or musical channel acts on obstacles and difficulties in communication, society, relationship and expression. Musictherapy has taken a central role not only in purely health-rehabilitative sectors, but especially in the field of education and school; music can be a powerful social mediator by setting up a dialogue with oneself and with others.

La Musicoterapia è una terapia che utilizza la musica, il ritmo, il suono e la melodia in determinate circostanze di patologia o disabilità, al fine di poter facilitare e migliorare aspetti di tipo relazionale, comunicativo e sociale. Questo tipo di tecnica fa parte dell'ampio gruppo delle terapie espressive che utilizzano le emozioni, sensazioni e percezioni a scopo terapeutico come forma di comunicazione e relazione con l'altro. Attraverso l'utilizzo terapeutico della musica è possibile lavorare su dimensioni fisiche, psichiche e sensoriali, facilitare esperienze sociali, e sviluppare una maggiore cosapevolezza delle proprie abilità. La Musicoterapia si caratterizza come un intervento di carattere preventivo, terapeutico e riabilitativo, la sua finalità è quella di sostenere lo sviluppo e l'evoluzione di aspetti legati alla motricità, affettività, linguaggio e socialità. La comunicazione attraverso un canale sonoro e/o musicale interviene su ostacoli e difficoltà relazionali, sociali, comunicazionali e espressivi. La Musicoterapia ha assunto nel tempo un ruolo centrale non solo in settori prettamente medico-riabilitativo, ma soprattutto in ambito educativo e scolastico; la musica può rappresentare un potente mediatore sociale creando un dialogo con se stessi e con gli altri.

Keywords

Musictherapy, expressive Therapy, Music, Communication, Relationship.

Musicoterapia, Terapie espressive, Musica, Comunicazione, Relazione.

Equal Contributors

1. Introduction

Musictherapy is part of the broader group of expressive therapies that employ emotions, feelings and perceptions for therapeutic purposes as a form of communication and relationship with others, which are used in various action fields like those of psychotherapy and rehabilitation for the treatment of different problems.

This type of alternative therapeutic interventions may be able to lessen and mitigate certain moods in order to improve the subject's life quality and well-being. The notion that music can have a positive influence on the individual's health and well-being is not recent, since, in ancient times, this evidence was already identified even by thinkers such as Plato and Aristotle, and the use of music in a therapeutic sense, namely music seen as relational and emotional stimulation and aggregation tool, is documented in numerous civilizations. However, the first approach (at a more strictly scientific level) was analyzed by Richard Brocklesby, an English doctor who, during his military experience, was particularly interested in the conditions in which the wounded were cared for by observing, among other things, the precariousness of shelters and their low level of hygiene. These aspects, according to the English doctor, had a negative impact on patients, especially under a psychological and emotional viewpoint. Brocklesby, in his most important work "Reflections of Antient and Modern Music with the Application to the Care of Disease" (1749), referring also to the philosophical approach of the classical age, reflected on the beneficial effect of music on the psychological and mental disorders, emphasizing its benefits and its ability to provide relief and restore a better inner balance.

This work is particularly important as it links the basically magical, social and philosophical approach of the effects that music generates in man of previous centuries to a more modern conception based on analytical observation with scientific characteristics. Actually, Brocklesby's theory has its roots in the social and unifying role that music has always had.

The music-emotional sphere bond is well known but, in order to find a scientifically structured and decisive foundation for the development of Musictherapy, we must necessarily go back to more recent times, in the years between the two world wars of the last century, when the first concrete attempts to use music as a therapeutic means were made. At that time, after the Second World War, in the United States a support program for military veterans hospitalized for various diseases was developed, which included performances by groups of musicians in order to alleviate the patients' conditions. Doctors soon realized the positive impact generated in subjects, at both physical and emotional level. The results were so encouraging that training programs were organized for specific operators, the first of which was held at the Michigan State University in 1944, and later in the United Kingdom, in 1968, at the Guildhall School of Music and Drama. Then the technique and the training schools of Musictherapy started to spread thoroughly.

There is no doubt on the ability of music to accompany and encourage particular feelings, and to support and guide our experiences: it is certainly a powerful catalyst that can become an important element of aggregation. Music goes beyond borders, nationalities and races, representing a powerful and effective communication system able to stimulate different emotions, feelings and moods that can be expressed and understood universally. It is an across-the-board unifying tool able to represent a space for sharing and partnership between different subjects, and that can use a language understood by everybody.

Music is a direct art form and expression, which does not require a specific cultural background, expertise and analytical skills: the music must be listened to and explicitly conveys its message, has a direct impact on the individual and reaches sensory and perceptual emotional levels. Is a universally-recognized art that goes beyond the boundaries of mind, overcoming diversity and entering into direct contact with the individual, with his feelings and emotions. Through Musictherapy individual and shared listening experience takes place, then conveying emotions from a most intimate sphere into a deep sharing and participation where everyone becomes part of a whole. Music is used as therapy to strengthen and rehabilitate parts of one-

self, to strengthen the sense of community by encouraging sociability. Through the language of music it is possible to employ alternative communication modes that facilitate and encourage greater closeness to oneself and others, regardless of any differences.

2. Music therapy and application fields.

Musictherapy is a therapy that employs music, rhythm, sound and melody in certain circumstances of disease or disability, in order to facilitate and improve social, communicative and relational aspects. This technique is commonly used to build new skills and abilities in the subject, and supporting him, at the same time, in his potentialities and evolutionary skills. Musictherapy is then used to promote and improve the well-being of the person in his totality, paying attention to the individual's needs and his relationships with the community. Through the therapeutic use of music it is possible to: work on different physical, psychological and sensory dimensions that characterize every subject, facilitate and support social opportunities and experiences, and develop greater awareness of one's own abilities by encouraging the relationship with the outside world. All these elements, created and supported by this type of practice, increase the subject's well-being and autonomy level, and become the diving force of participation, engagement and opportunities for positive and constructive social experiences. This type of therapy uses music as an instrument for activating or reactivating different abilities in the subject, stimulating sensory and perceptual levels, and supporting emotional, cognitive, communicative and relational aspects.

Musictherapy is characterized as a preventive, therapeutic, and rehabilitative intervention that uses music as a communicational and expressive modality; its purpose is to support the development and evolution of aspects related to motor skills, emotions, language and sociability. The element that characterizes it is the communication through sound and music channel, which facilitates the expression and recognition of one's own emotions and feelings, acting on obstacles and difficulties at social and relational level. This type of therapy uses two types of approach: active and receptive. In active Musictherapy the subject is actively involved in the process by using musical instruments that are at his disposal; the receptive (or passive) approach consists in the subject's guided listening to the music, which is selected by the subject himself or by an expert.

Musictherapy, given its characteristics and peculiarities, embraces a wide range of problems and difficulties affecting the physical, psychological, relational, communicative and expressive sphere. Through music it is possible to generate several opportunities for intervention, deep emotional and affective contact, a chance to build individual and social integration. Therefore, this type of therapy embraces different intervention areas aiming at intellectual, physical, social and well-being needs, for every person cared for. The intervention areas which generally addresses this kind of technique are that therapeutic, preventive, integrative and of habilitation-rehabilitation. In each of these areas there is the figure of the music therapist who, through his work, through music, undertakes and directs, along with the individual or the group, a functional relationship that may lead to the well-being and to a change. All the intervention areas are addressed to persons with psychiatric, mental, developmental and psychomotor disorders, and to those belonging to social groups at risk; depending on the complexity of the problem, the music therapist will collaborate with a team of medical experts, psychologists and therapists to supervise the work, goals and possible improvements of the therapy itself.

Musictherapy has taken a central role not only in purely health-rehabilitative sectors, but especially in the field of education and school; music can be a powerful social and communication mediator able to set up a connection, a dialogue with oneself and with others. This technique, like all the expressive therapies, allows establishing a more intimate relationship with oneself, with reality and different realities, with a sound/musical language used and understood by all, and shared by every participant. In this context, the expressive action contains inclusive, social

and relational skills that go beyond any difficulties of strictly verbal understanding, breaking down the barriers of diversity, and bringing considerable integration opportunities especially for individuals with special educational needs. The expressive action involves completely the individual at biological, perceptual, intellectual, affective-emotional and social level, allowing implementing an interactive process between the individual and the environment, between child and adult, and between distant and different realities. Therefore, through Musictherapy, the educational experience constantly interprets many different needs to finalize every intervention in the right way, allowing for the integration of subjects within their own communities and avoiding any form of exclusion and isolation.

3. Music and therapy: a combination that works.

Music is able to evoke different feelings and emotions; it represents something that inherently carries our mind in another dimension allowing us having immediately a deep connection with ourselves and what we're feeling. The sound/musical element can be used to discover, find back and develop potentialities and resources in a way that is free from limits and barriers. Music represents a factor of collectivity and partnership that brings people into a dimension of sharing and participation. People sing together, dance together, in every culture; through music it is possible to create a relational and empathic contact with each other by generating expressive and communicative actions that make you get involved and take part in it. The power of music meets the therapy by creating an alliance strengthening its healing, educational and social value.

In the practice, musictherapy uses music to encourage and support the development of the person in his totality by reaching his deep emotional and affective dimensions, which become an essential means for establishing a significant contact with oneself and with the community. Perceiving music becomes an experience of completeness and meeting that leads us away from isolation, a means of construction and training, of creative experience; it welcomes sensible and stimulating elements that influence our body and mind, allowing entering more directly the world of emotions and expressions.

So music represents in itself a highly effective therapy, a universal element that is not only used in the field of Musictherapy. Dancetherapy and Biodance, in fact, use this element as a facilitator of the movement and as a tool that enhances the impact on our emotional and imagination skills. Sound and melody, along with movement and dance, allow expressing one's own emotions and understanding one's own moods and feelings. In Biodance, in particular, music is a means of contact with one's own body, a means of deep knowledge, of redefinition of one's own potentialities for the person's harmonious development. The combination of music, movement and emotion in Biodance generate the chance to express one's own identity in an authentic and real way. The Biodance system achieves its aims of renewal and rebirth of human potentialities, since it uses and activates simultaneously a number of factors that are especially useful to increase the pleasure of living and feeling greater self-perception. Every exercise in Biodance is carried out on specific music that facilitates the expression of oneself and one's own feelings, stimulating deeply one's own emotions. Therefore, there are specific criteria to use and select music that evoke significant emotional and functional contents in the subject. The choice of music (defined as organic in Biodance) recalls the need to restore a biological homeostasis so that the musical factor can recall specific emotions, and the emotion itself can bring the subject to perceive the sound in its depth, thus creating a very meaningful bond. The carefully selected music therefore responds to needs that promote a biological, psychic and emotional revival aiming at generating active effects to promote feelings of happiness and vitality, and / or calming effects to induce harmony, affectivity and sense of peace. Through music it is possible to describe and talk about oneself, one's own emotions, and one's own identity by using it as a universal language that can be expressed through an instrument, a sound, a song, a movement. Musictherapy, along with other expressive-musical therapies, leads music to be and

become a healing, preventive and inclusive tool, which can be used in different social contexts and address different issues. Music, in its unrealistic, spiritual and indefinable world, through its inherent characteristics, offers a tangible opportunity to create another space where to reduce distances with oneself and with each other

4. Conclusion

Musictherapy is a particularly effective tool in different contexts and for dealing with different issues. It acts as a tool that allows integrating one's own emotions by committing to running parallel with the growth, the affective and relational evolution of every subject. Music is an art that connects, upsets and redefines, that facilitates social participation by everyone, and that promotes greater contact with oneself through a universal language. Through it, it is possible to create a connection with oneself, with one's own feelings, while simultaneously working on the possibility of creating a social network that has no difference and is independent of everyone's abilities and possibilities. The realization of a shared music "world", of a place of participation and belonging, is in fact a place of exchange in which to freely experience relationships, thoughts and emotions. By favoring the creation of a climate of availability and collaboration, greater awareness and sensitivity towards oneself and others is encouraged, thus increasing everyone's empathetic and relational abilities. Musictherapy shows itself as an effective tool for bringing relationships back to greater authenticity, spontaneity and authenticity. Music can really be a place where the concept of union and integration finds fertile ground to be developed and strengthened by overcoming the distances of individuality, just like it happens in rhythm and dance.

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Analysis of metacognitive control capacity in motor skills: training proposals

Analisi della capacità di controllo metacognitivo nelle abilità motorie: proposte di allenamento

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Abstract

Recently, the metacognitive approach has been applied to the motricity field with the aim of establishing and developing control and planning skills of behaviors in children and teens. Metacognitive control includes the ability to identify the relevant strategy for dealing with a task and can be detected by observing how the task is accomplished. Metacognitive verification processes are operations that oversee the task execution. A new tool is proposed that seeks to contextualize situations where metacognitive competence should emerge in a motivating field for kids: football.

Di recente l'approccio metacognitivo è stato applicato al campo della motricità con l'obiettivo di stabilire e sviluppare, in bambini e ragazzi, la capacità di controllo e programmazione dei comportamenti. Il controllo metacognitivo comprende la capacità di individuare la strategia pertinente per affrontare un compito e può essere rilevato osservando come il compito viene realizzato. I processi metacognitivi di verifica sono operazioni che soprintendono all'effettuazione del compito. Viene qui proposto un nuovo strumento che cerca di contestualizzare le situazioni in cui dovrebbe emergere la competenza metacognitiva in un ambito motivante per i ragazzi: il gioco del calcio.

Keywords

Training, group sports, attention, attivation

Allenamento, giochi di squadra, attenzione, attivazione

Il presente lavoro è frutto di una collaborazione di tutti gli Autori. È possibile identificare lo specifico contributo come segue: Peluso Cassese paragrafi 4,5,6; Impara paragrafo 1; Torregiani paragrafo 2.

1. Introduzione

Parlando di metacognizione o conoscenza metacognitiva si intende l'insieme delle idee che un individuo ha sviluppato sul funzionamento mentale. L'oggetto della conoscenza metacognitiva è l'attività mentale e non il comportamento o il mondo circostante. I processi metacognitivi di controllo sono invece quelle operazioni che sovrintendono all'effettuazione del compito cognitivo; alcuni esempi possono essere: rendersi conto dell'esistenza di un problema, essere in grado di predire la propria prestazione, pianificare l'attività cognitiva conoscendo l'efficacia delle azioni programmate, registrare e guidare l'attività cognitiva in relazione all'obiettivo posto (Cornoldi, 1995). Diverse, invece, sono le «strategie», che costituiscono il percorso che il soggetto decide di seguire per affrontare un compito cognitivo. Queste possono essere diverse perché diverso può essere il contesto, il compito da affrontare, e diverse possono essere le caratteristiche individuali dei soggetti. L'ambito della metaconoscenza ha visto nascere al suo interno, nel corso degli anni, numerose ramificazioni, tra cui, una delle più rilevanti, è quella relativa alla «teoria della mente». Essa riguarda il saper descrivere e spiegare la comprensione degli stati mentali propri ed altrui e perciò le modalità attraverso le quali si percepisce, si pensa e si agisce. Si parla di «teoria» non in un senso strettamente scientifico o matematico del termine, ma per evidenziare che la comprensione intuitiva delle azioni umane ha una natura mentalistica (Camaioni, 1995). Infatti quando le persone parlano e ragionano su loro stesse e sugli altri fanno riferimento molto spesso a stati mentali quali pensieri, emozioni, desideri, credenze, intenzioni e credenze.

2. Il controllo metacognitivo e l'attività motoria

Il controllo metacognitivo, si è detto, include la capacità di individuare la strategia pertinente per affrontare un compito. Recentemente si è iniziato a studiare tale capacità nell'ambito delle attività motorie (Johnson et al., 2009; Rabaglietti et al., 2009). Il punto di partenza di questo nuovo approccio è l'idea, ormai consolidata da tempo, dell'importanza della conoscenza e dei meccanismi di controllo dei processi cognitivi nell'apprendimento scolastico attraverso il costrutto della metacognizione (Albanese et al., 1995). Oggi si parla, però, di pluralità di percorsi metacognitivi (Albanese, 2003) dove è evidente il ruolo della componente emotivo-motivazionale e dell'errore, attraverso cui l'esperto promuove maggiore autonomia nell'allievo e si presenta come mediatore tra quest'ultimo e la nozione da apprendere (Albanese et al., 2006). Parallelamente, in ambito motorio e sportivo l'apprendimento consapevole, la motivazione a correggere autonomamente gli errori, l'elaborazione personale e il conseguente adeguamento della risposta motoria, portano ad un miglioramento della prestazione intermini qualitativi (Schmitd e Wrisberg, 2000). Rabaglietti suggerisce che quindi potrebbe risultare riduttivo intendere la pratica motoria o sportiva come una semplice successione di compiti motori, o come ripetizione «automatica o automatizzata» di modelli tecnico-esecutivi più o meno economici ed efficaci. «*Il successo di una prestazione motoria è rappresentato dall'insieme di abilità cognitive e motorie e dalla loro interazione con le aree affettivo-relazionali. Un processo di apprendimento intenzionalmente attuato permette di risolvere problemi motori in modo adeguato a finalità ed obiettivi prefissati e si basa su condizioni neurologiche, fisiologiche e psicologiche che consentono all'allievo di apprendere, organizzare, controllare e trasformare il movimento* » (Rabaglietti et al., 2009). La proposta dell'autrice è quella di indagare, ad un livello esplorativo, se un principio simile alla metacognizione sia alla base anche dei processi di apprendimento del comportamento motorio. In occasione di uno dei suoi ultimi lavori di ricerca la Rabaglietti ha coniato il neologismo di «*metamotricità*» con cui si intende «*una motricità di secondo livello, vale a dire l'insieme di attività connesse con la consapevolezza e il controllo del movimento*» (Rabaglietti et al., 2009). L'autrice alla luce dei suoi ultimi risultati, sottolinea l'importanza di approfondire lo studio del ruolo svolto dalla consapevolezza e dal controllo dei propri processi

di apprendimento implicati. Lo strumento proposto in questo articolo si colloca su un continuum del suddetto ambito e, nello specifico, mira ad indagare la capacità metacognitiva di controllo dell'azione motoria.

3. Metodologia e Campione

I bambini e i ragazzi che hanno partecipato alla ricerca appartengono a società calcistiche riconosciute dalla FIGC nella provincia di Roma. Le squadre coinvolte sono quelle del settore giovanile: le tre squadre dei Pulcini e le due degli Esordienti. Il campione totale consta di 77 soggetti, tutti di genere maschile, e sono così distribuiti:

Pulcini (9 anni di età) = 15 soggetti;
Pulcini (10 anni di età) = 17 soggetti;
Pulcini (11 anni di età) = 17 soggetti;
Esordienti (12 anni di età) = 15 soggetti;
Esordienti (13 anni di età) = 13 soggetti.

4. Strumenti

Lo strumento utilizzato in questo studio è un questionario volto a misurare la capacità di controllo metacognitivo del comportamento motorio ed è costruito prendendo come riferimento il gioco del calcio. Tramite questo strumento si cerca di verificare quanto i soggetti-calciatori che lo compilano prestano attenzione e dànno importanza ad elementi di carattere metacognitivo, rispetto a quelli puramente tecnici. Il primo passo nella costruzione del questionario è stato quello di scegliere in modo accurato le situazioni di gioco da proporre; la scelta è stata fatta in base a due criteri: la familiarità delle situazioni di gioco e il fatto che esse si prestassero a proporre risposte implicanti un certo sforzo cognitivo e comprendessero la presenza di due o più giocatori. Alla fine sono state selezionate le seguenti 12 situazioni di gioco: calcio di rigore, dribbling, colpo di testa, passaggio di ritorno, situazione di «2 contro 1» in difesa, calcio di punizione, tackle, calcio d'angolo, rimessa laterale, uscita del portiere, cross e «2 contro 1» in attacco. In secondo luogo è stata curata la rappresentazione grafica di ciascuna delle situazioni sopra descritte. I disegni sono stati strutturati in modo che fossero semplici e si limitassero a rappresentare specificamente il frangente di gioco descritto. Inoltre, essi raffigurano l'azione in modo «neutro», lasciando piena libertà di interpretazione, ovviamente entro i limiti imposti dal gioco stesso, al soggetto che si appresta a immedesimarsi nella scena. Per ogni item è stata predisposta una serie di possibili risposte, ossia modi diversi di pensare e quella determinata azione. Poi per ciascuna vignetta sono state proposte quattro risposte. Le opzioni di risposta sono di due diversi tipi, ossia alcune di carattere tecnico e altre di carattere metacognitivo. Per esempio, nell'item 1 (calcio di rigore), una risposta di carattere tecnico è: «Calciare la palla nell'angolino della porta», mentre una di carattere meta cognitivo è: «Pensare a dove si butterà il portiere e calciare dalla parte opposta». Inoltre alcune risposte sono corrette e appropriate, mentre altre poco pertinenti o scorrette. Il questionario è strutturato nel seguente modo: sei situazioni di gioco presentano come possibili risposte due opzioni di carattere tecnico (di cui una appropriata e una meno appropriata) e due opzioni di carattere metacognitivo (di cui una corretta e una non corretta); le altre sei situazioni invece hanno come risposte quattro opzioni tutte di carattere metacognitivo, concettualmente ordinate da quella più corretta a quella meno corretta (l'ordine di presentazione dei gradi di correttezza varia in maniera casuale tra gli item). Per quanto riguarda le risposte di carattere tecnico, si parla di «appropriata» e «meno appropriata» in quanto quest'ultima nella maggior parte dei casi non è da intendersi come errata ai fini del gioco, ma meno corretta dal punto di vista degli esperti del gioco del calcio. Per quanto riguarda le opzioni metacognitive si è parla di risposta «corretta» e «non corretta», perché quest'ultima è

effettivamente errata ai fini del gioco. Gli item che prevedono risposte sia tecniche sia metacognitive sono stati chiamati «tecnici-mentalistici», mentre gli altri «mentalistici». L'ordine degli item nel questionario è stato stabilito cercando di presentarli in ordine di complessità crescente e alternando gli item «mentalistici» e quelli «tecnici-mentalistici». La modalità di risposta dello strumento prevede che i soggetti ordinino le diverse opzioni (mettendo un numero nella casella apposita) da 1 a 4 secondo l'importanza attribuita a ciascuna possibilità di risposta (da ciò che farebbero o penserebbero per primo a quello che farebbero o penserebbero per ultimo).

5. Procedura

La somministrazione del questionario è stata compiuta direttamente dall'autore. Tale operazione è stata svolta in cinque sessioni differenti, in giorni diversi nell'arco di circa tre settimane. La raccolta dei dati è avvenuta durante il normale svolgimento di un allenamento; i ragazzi sono stati divisi in gruppetti e hanno risposto al questionario all'interno dello spogliatoio. Prima di iniziare la somministrazione è stato brevemente spiegato lo scopo della ricerca e precisato che si trattava di una prova non valutativa; inoltre è stato illustrato un esempio di come bisognava rispondere agli item. In media ogni ragazzo ha risposto al questionario in circa quindici minuti. Agli allenatori delle squadre interessate è stato chiesto di fornire una lista dei propri ragazzi in cui dovevano indicare per ognuno di essi un punteggio da 1 a 3 relativamente alla loro abilità tecnica e uno relativamente alla loro capacità metacognitiva in campo.

6. Risultati

Sono state effettuate tre analisi:

- analisi dell'effetto dell'età sul punteggio totale ottenuto nel test;
- analisi dell'effetto dell'età sull'ordine di ciascuna risposta per ogni item;
- correlazione fra il punteggio del test e le valutazioni compiute dagli allenatori (è stato preso in considerazione prima il totale dei soggetti e poi sono state considerate le singole fasce d'età).

Il punteggio totale del test è stato calcolato sommando per ciascun soggetto il numero corrispondente all'ordine di risposta dato all'opzione cognitiva corretta per ogni item. In questo modo più il punteggio ottenuto è basso, più si è in presenza di una maggiore capacità metacognitiva: in ogni item infatti la risposta rivelativa della capacità metacognitiva è assegnare l'ordine 1 all'opzione metacognitiva corretta.

Effetto dell'età sul punteggio totale

La capacità di controllo metacognitivo rivelata dal punteggio totale del questionario aumenta al crescere dell'età: $F(4, 72) = 2{,}55$, $p < .05$. Al test di Newman-Keuls è risultata significativa soltanto la differenza fra i due gruppi estremi, ossia quello dei bambini di 9 anni e quello dei ragazzi di 13 anni.

Effetti dell'età sull'ordine di ciascuna risposta per ogni item

Nei singoli item la percentuale di soggetti che hanno scelto come prima la strategia più pertinente aumenta con l'età, mentre diminuisce la scelta della strategia meno adeguata.

Correlazioni fra il punteggio totale del test e le valutazioni degli allenatori

La capacità metacognitiva misurata dal questionario è significativamente correlata all'abilità metacognitiva attribuiti dagli allenatori ($rho = -0{,}24$, $p < 0{,}05$), ma non a quella tecnica ($rho = -0{,}14$). Il medesimo pattern di correlazioni emerge analizzando i dati distintamente entro ciascuna fascia di età.

7. Conclusioni

In generale si è riscontrata una diversa importanza attribuita all'aspetto tecnico e all'aspetto cognitivo: i più piccoli (9 e 10 anni di età) prediligono il primo e i più grandi (11, 12 e 13 anni di età) il secondo, anche se poi sono quest'ultimi a riconoscere, all'interno di una situazione di gioco, gli aspetti metacognitivi più appropriati e ad ordinare le diverse opzioni nell'ordine corretto, più spesso rispetto ai piccoli. L'ipotesi che il punteggio ottenuto al test sia legato all'età – e precisamente migliori al crescere dell'età – è stata confermata. Infatti i dati mostrano come al crescere dell'età migliori la prestazione al test. Si può affermare inoltre che per i ragazzi di 11, 12 e 13 anni, come da previsione, si sono riscontrati i migliori punteggi al test e un maggior riconoscimento degli aspetti metacognitivi appropriati all'interno di una situazione di gioco ma, inaspettatamente e in contrasto con quello ipotizzato, i ragazzi più grandi attribuiscono maggior importanza all'aspetto tecnico rispetto a quello metacognitivo, al contrario dei più piccoli. Si può ritenere confermata anche l'ipotesi relativa all'esistenza di una relazione fra punteggio relativo all'abilità metacognitiva attribuito dagli allenatori e il punteggio ottenuto al test. Infatti i dati mostrano la tendenza ipotizzata, ossia che i soggetti con un punteggio attribuito dagli allenatori più alto hanno ottenuto le migliori prestazioni al test. Un'ulteriore riflessione riguarda un aspetto che è emerso in seguito all'analisi dei dati, ma che era soltanto indirettamente compreso all'interno del test. Lo strumento è stato costruito appositamente per misurare la capacità metacognitiva dei soggetti inerente al gioco del calcio e in generale all'efficacia dell'azione motoria. Sono state però appositamente inserite alcune opzioni mentalistiche relative a sentimenti ed emozioni di compagni e avversari per verificare indirettamente altri aspetti, non certo secondari, ma considerati non efficaci nello svolgimento dell'azione calcistica. Infatti, nell'ordine ideale pensato a priori, queste possibili risposte occupano le ultime posizioni. E' risultato che i più piccoli (9 e 10 anni di età) sono i più attenti ai pensieri e alle emozioni di avversari e compagni. I più grandi hanno giustamente risposto scegliendo le opzioni più appropriate per lo svolgimento dell'azione e hanno sempre collocato all'ultimo posto l'opzione mentalistica non corretta (relativa ad emozioni e pensieri irrilevanti per le strategie di gioco), preferendo quella tecnica meno appropriata. Ai fini del gioco risulta più dannoso un gesto tecnico scorretto piuttosto che pensare, per esempio, all'eventuale offesa del mio compagno nel caso non gli passassi la palla. I più piccoli invece collocano, in alcuni casi, queste risposte mentalistiche irrilevanti anche nelle prime posizioni, mostrando tuttavia di riconoscere quali siano gli aspetti più corretti nel svolgere l'azione. Appare che i più grandi sono così attenti a non sbagliare nell'esecuzione del gesto tecnico da dimenticarsi quasi di non essere da soli in campo. È indiscutibile che la tecnica sia la base di ogni attività sportiva ma, specialmente in uno sport di squadra, diventa altrettanto fondamentale l'aspetto metacognitivo, che non si limita a «leggere» in modo corretto l'azione, ma anche a «sentire» in campo gli avversari e soprattutto i compagni. Crescendo, infatti, non si dovrebbe perdere la sensibilità e l'attenzione spontanea e sincera che si ha da piccoli in campo e fuori nei confronti degli altri. Occorrerebbe sempre allenare bambini e ragazzi concentrandosi non esclusivamente sugli aspetti tecnici, ma inserendo aspetti tattici di un crescente spessore metacognitivo. Si rischia altrimenti di preparare giocatori perfetti sul piano tecnico, ma «spenti mentalmente», portati a giocare come macchine guidate dagli allenatori in panchina.

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Pedagogical-Educational-Didactic Interpretation of the Game *"GiochiAMO" … sano*

Interpretazione pedagogico-educativo-didattica del gioco "*GiochiAMO … sano*"

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Abstract

Pedagogically disseminate and prepare children and their families to the knowledge of healthy eating by promoting, at the same time, physical activity-motor activity-sport through appropriate forms of education and didactic, becomes more and more urgent in order to prevent obesity and overweight in children and adolescent, as well as to reduce the social cost of public health. The present study describes the research protocol of intervention carried out on fieldwork and previously called "GiochiAMO", now completed with the pedagogical-educational-didactic analysis through which it changes its name to "GiochiAMO…sano". The research aims to:
a) increase the knowledge on nutrition through the study of the food pyramid;
b) change the nutritional behavior reported to the Mediterranean diet with the increase of consumption of fruit and vegetables;
c) to promote physical activity, motor activity and sport.
The sample selection to be involved will be represented by children attending primary schools and selected respecting the horizontal school curriculum and then subdividing the identified pupils in experimental and control groups. The intervention will take place through the use of card games and board games, including those that include physical activity, motor activity and sport. "GiochiAMO…sano" as well as its predecessor "GiochiAMO", is definitely a breakthrough in Italian school, in order to create settings and school policies oriented to the promotion of healthy eating; an adequate and correct physical activity, motor activity and sport; training and education oriented to the respect of self and others based on the attention of person's dignity.

Propagare e preparare pedagogicamente, attraverso forme idonee di educazione e di didattica, i minori e le loro famiglie alla conoscenza di una sana alimentazione promuovendo, nel contempo, l'attività fisico-motorio-sportiva, diventa sempre più impellente al fine di prevenire l'obesità e il sovrappeso in età scolare e adolescenziale, nonché ottenere una riduzione del costo sociale della salute pubblica. Il presente studio descrive il protocollo di ricerca di un intervento svolto sul campo e, precedentemente, denominato "GiochiAMO", oggi, invece, completato con l'analisi pedagogico-educativo-didattica, assume il nome di "GiochiAMO … sano"; esso mira:
a) ad aumentare la conoscenza sull'alimentazione attraverso lo studio della piramide alimentare;
b) a modificare il comportamento nutrizionale riferito alla dieta Mediterranea con l'incrementare di consumo di frutta e verdura;
c) a promuovere l'attività fisica, motoria e sportiva.
Il campione da coinvolgere sarà rappresentato da bambini frequentanti le scuole primarie e scelti rispettando il curricolo orizzontale scolastico suddividendo, poi, la scolaresca individuata in gruppo sperimentale e gruppo di controllo. L'intervento si svolgerà attraverso l'uso dei giochi di carte e giochi da tavolo, compresi quelli in cui sono inclusi l'attività fisica, motoria e lo sport. "GiochiAMO… sano", così come il suo predecessore "GiochiAMO", è decisamente un'innovazione nel panorama scolastico italiano, nella prospettiva di realizzare ambienti e politiche scolastiche orientate alla promozione di una sana alimentazione; una corretta attività fisica, motoria e sportiva; una formazione e un'educazione al rispetto di sé e degli altri fondata sull'attenzione verso la dignità della persona.

Keywords

Attività fisica, Attività motoria e Sport

Physical activity, Motor activity and Sport.

Premessa

Il presente articolo ne riprende uno precedente, pubblicato con altri studiosi – il cui titolo è "GiochiAMO! Muoviamoci e mangiamo sano! La promozione dell'attività fisica e della piramide alimentare per i bambini: protocollo di una sperimentazione di campo" (1) -, in cui si rivolgeva l'attenzione all'alimentazione e all'attività fisica come elementi fondamentali per la crescita dei minori. Un sano stile di vita sin dalla giovane età, si diceva, rappresenta la prima regola per prevenire malattie e indugiare, così, in uno stato di buona salute. È necessario favorire il consumo di frutta e verdura da parte dei soggetti in crescita per educarli all'acquisizione di *sane* abitudini alimentari nonché per contribuire alla lotta consapevole all'obesità. L'abituale consumo dei cosiddetti "cibi spazzatura" contenenti grassi saturi, grassi idrogenati, conservanti e carboidrati sono i responsabili principali dell'obesità.

Una corretta alimentazione, invece, deve coniugarsi e completarsi con attività fisica idonea e adeguata. La regolare pratica motoria o anche il regolare movimento, diventano fatto essenziale e significativo per il corretto sviluppo mentale e fisico del minore assicurando una *sana* crescita fisiologica con vantaggio anche nell'età adulta. Le raccomandazioni dell'Organizzazione Mondiale della Salute (2), al fine di migliorare gli indicatori di salute metabolici e cardiovascolari in soggetti in crescita, riguardano la pratica di attività fisica, da moderata a elevata intensità, da svolgere per 60 minuti al giorno; superate le ore giornaliere di esercizio, il corpo trarrà maggiori benefici in termini di salute e benessere; svolgere, poi, attività aerobica ad alta intensità per 3 volte a settimana.

Il gioco: premesse pedagogico-educativo-didattiche

Il gioco, grazie a pedagogisti come Quintiliano, Fröebel, Montessori, Decroly, Huizinga, è considerato uno strumento fondamentale per l'uomo specie nell'età evolutiva. Ciò poiché stimola la creatività, la socialità, lo sviluppo intellettivo, la crescita con forte e rilevante valenza pedagogico-educativa a vantaggio di ogni forma di apprendimento (3). I bambini quando giocano, come affermano Piaget e Coli (1997), *dimenticano* l'ambiente circostante immergendosi completamente nelle attività ludiche, ma degne di ammirazione (4). Durante la fanciullezza e l'adolescenza, il gioco può rappresentare uno strumento educativo efficace per conquistare abitudini *sane;* un esempio lampante può considerarsi la prevenzione dell'obesità attraverso attività ludiche collaterali e basata sul principio della conoscenza delle questioni. Tra tali attività giocose parallele, come sostengono Viggiano e i suoi collaboratori, vi sono i giochi di società (5) orientati sia alla prevenzione delle malattie cronico-degenerative sia al miglioramento degli stili di vita fra gli adolescenti e i giovani adulti (6).

Utilizzare carte da gioco per la promozione della prevenzione in sé è già un fatto significativo, ma rendere attuabile il processo di prevenzione degli incidenti nell'infanzia diventa ancor più rilevante e fondamentale. Il gioco, come suggerito e dimostrato ampiamente dalla letteratura pedagogica, è fenomeno opportuno e idoneo nel promuovere cambiamenti sia nelle conoscenze sia nelle capacità di coloro i quali lo svolgono e vi partecipano (7). I giochi di carte, dal punto di vista pedagogico, possono agevolare piacevolmente l'apprendimento con un certo grado di ristoro educativo grazie all'impegno didattico profuso dall'adulto (autorevole) che gestisce il gioco stesso. Si tratta di una didattica complessa, come può essere quella in campo nutrizionale, alla maniera dell'esperienza britannica con il gioco "Top Grub" (8).

Allo stato attuale delle conoscenze, dunque, non è stato ancora sviluppata un'attività ludica appartenente ai giochi da tavolo o di carte con l'obiettivo di promuovere, contemporaneamente, attività fisica e nutrizione *sana*. L'obiettivo di questo lavoro, perciò, è quello di presentare il protocollo di ricerca del progetto "GiochiAMO", trasferendolo in quello di "GiochiAMO… sano", il quale ha lo scopo di aumentare sia le conoscenze sulla dieta mediterranea sia l'utilità dell'attività fisica, motoria e sportiva. Gli obiettivi specifici del progetto, perciò, riguardano

l'introduzione e la verifica, attraverso l'uso di giochi di carte o giochi da tavolo, dell'assimilazione e dell'accomodamento, dunque dell'apprendimento e della conoscenza, della piramide alimentare; del consumo di gruppi di diversi alimenti con le loro proprietà; del ruolo e della funzione dell'attività fisica, motoria e sportiva per una crescita umana *sana* e integrale.

Metodologia. Il disegno dello studio e il *setting*

La presente ricerca, così come lo studio precedente, sarà sperimentale, randomizzato, controllato e riferito alle classi nel rispetto del curricolo orizzontale delle classi seconda e quarta. Il *setting* prescelto sarà quello della scuola primaria. L'intervento coinvolgerà alcune classi in qualità di gruppo sperimentale, mentre le altre fungeranno da gruppo di controllo.

Per ogni classe si chiederà la collaborazione di un insegnante per promuovere l'adesione allo studio e per procedere a operare una serie di azioni finalizzate a informare e a motivare adeguatamente sia gli alunni sia i loro genitori. A tal fine si renderà necessaria l'organizzazione di un incontro con i genitori degli scolari per coinvolgerli sugli obiettivi e sui metodi dello studio. Vi è, poi, un secondo obiettivo da raggiungere nella scuola, però, dei bambini ricoverati in ospedale per motivi oncologici, reclutando il campione solo dopo la remissione della patologia.

L'intervento

L'intervento predisposto consisterà in due momenti distinti:

1. nella prima fase, comune sia alle classi sperimentali sia a quelle di controllo, ci sarà una breve presentazione, da parte di tutti gli esperti coinvolti, dunque gli studiosi della teoria dell'allenamento, i pedagogisti, i medici del campo dell'igiene e della nutrizione. In particolare gli argomenti trattati saranno:

a) la piramide alimentare;

b) l'attività fisica, motoria e sportiva;

c) la relazione e la comunicazione interpersonale.

2. La seconda fase consisterà nella pratica dei giochi, ma solo nelle classi considerate sperimentali.

Ogni classe sarà suddivisa in gruppi di alunni composti da massimo sei unità; tali gruppi saranno impegnati in giochi di carte e in giochi da tavolo. Tutti i giochi proposti consentiranno di veicolare i concetti principali della piramide alimentare ove con le carte *più* "redditizie" sono costituite dai disegni rappresentanti gli alimenti, tipici della Dieta Mediterranea, come frutta, verdura, cereali, legumi; mentre le carte *meno* "redditizie" sono rappresentate da cibi poco salutari come *hot dog*, bibite gassate, dolci, ecc.

Strumenti: giochi di carte e giochi da tavolo

I principali giochi di carte utilizzati per svolgere il percorso educativo, sono i seguenti:

"Pappa", rivisitazione delle regole del gioco "Tappo". Lo scopo del gioco è quello di realizzare un pasto completo con carte di colore diverso che contempli sempre la presenza di frutta e verdura;

"Piramemory", rivisitazione delle regole del gioco "Memory". Lo scopo del gioco è quello di accoppiare carte simili;

"Zompa verdura", rivisitazione delle regole del gioco "Salta cavallo";

"Frutta e mezza", rivisitazione delle regole del gioco "Sette e mezzo".

I principali giochi da tavolo utilizzati nel corso delle attività generali proposte sono i seguenti:

"Mangiopoli", rivisitazione delle regole del gioco "Monopoli". Lo scopo del gioco è di trarre profitto, affittando, comprando e vendendo le proprietà che si trovano lungo il percorso

della plancia di gioco, sino a diventare il giocatore più ricco di vitamine e, possibilmente, il più in forma;

"Piramidiamo", con cui si intende, con l'aiuto degli esperti, costruire una dieta settimanale attraverso l'uso delle carte ispirandosi al modello della piramide alimentare.

I giochi da tavolo utilizzati nel corso delle attività fisiche, motorie e sportive proposte sono i seguenti:

il "Gioco dell'oca Egiziana", rivisitazione delle regole del comune gioco dell'oca. Le carte virtuose, cioè prevalentemente quelle relative a frutta e verdura, consentono di progredire nel tabellone;

l' "Egiziamo", rivisitazione delle regole del gioco "Ruba bandiera".

Il gioco si svolge con due squadre contrapposte, ove sono chiamate le carte e chi riesce a raggiungere per primo la bandiera risponde a domande sulla piramide alimentare e sull'attività fisica, motoria e sportiva, sulla prevenzione e sull'educazione alla salute.

Raccolta dati

Per procedere nella raccolta dei dati sarà somministrato un questionario ai bambini in modo da avere uno strumento immediato e semplice su cui lavorare.

Il questionario si compone di quattro parti:

a) informazioni demografiche;

b) conoscenza sulla nutrizione;

c) comportamento alimentare;

d) attività fisica, motoria e sportiva svolta.

La modalità di somministrazione del questionario si svolgerà alla presenza di un insegnante.

Le successive valutazioni saranno fornite chiedendo di ricompilare il questionario allo stesso modo, al fine di verificare l'efficacia dell'intervento nel tempo, sia sul versante delle conoscenze sia su quello dei comportamenti.

Particolare attenzione e riserbo si presterà al trattamento dei dati personali sensibili e, in particolare, i dati d'identità personale non saranno previsti per persone non autorizzate nel progetto; i nomi e i riferimenti di contatto raccolti saranno tenuti separati dai dati d'identificazione e collegati da un codice numerico.

I dati ottenuti saranno poi inseriti in un database e analizzati grazie al software statistico SPSS 23.

Il nesso tra attività fisica, motoria e sportiva è la salute. Essa, nel tempo e nelle civiltà, è elemento studiato e consolidato (9, 10). La prevenzione all'obesità, invece, fatto essenzialmente presente nelle civiltà occidentali, deve essere incoraggiata fin dalla più tenera età, pur potendo intervenire con attività di trattamento efficace (10). In Italia la prevalenza di obesità e di sovrappeso nei bambini è elevata (11, 12); l'implementazione di un regime alimentare di tipo mediterraneo può modificare ed essere associato alla prevenzione di patologie degenerative, al miglioramento dell'aspettativa di vita (13), così come della salute e della riduzione dei costi sociali (14).

Conclusioni

Il progetto "GiochiAMO … sano", dunque, attraverso i momenti di ludici veri e propri favorisce la possibilità, per l'adulto e l'educatore, di individuare eventuali conflitti interpersonali sia con i pari sia con i familiari. A tal punto, perciò, l'intervento dell'esperto di educazione e della relazione sarà fondamentale poiché potrebbe essere necessario sgombrare le tensioni a base ansiogena che potrebbero essere presenti negli alunni.

L'obiettivo, di conseguenza, oltre a essere quello di promuovere le conoscenze relative alla piramide alimentare, all'alimentazione mediterranea, alla promozione dell'attività fisica, motoria e sportiva attraverso il gioco di carte e i giochi da tavolo, è quello di trasformare le conoscenze così acquisite in competenze. Ciò sia nei minori sia negli adulti. Per questo il presente progetto (15) è innovativo, specie in una prospettiva utile all'implementazione di nuove politiche scolastiche negli ambienti educativi (16, 17).

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Pedagogia e Didattica Speciale nel Contesto Scolastico

Special Pedagogy and Didactics in the School Context

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Abstract

The aim of this research paper is to highlight the importance of a pedagogical and special education approach in the school context.
In this regard we analyze the main methodologies of special pedagogy and education which might be adopted at school level to promote the processes of inclusion and integration.
Only starting from the school system we can arrive to a concrete social development.

L'obiettivo del presente contributo di ricerca è quello di evidenziare l'importanza di un approccio pedagogico e didattico speciale nel contesto scolastico.
A tal proposito si analizzano le principali metodologie di didattica speciale che potrebbero essere adottate a livello scolastico per favorire i processi di inclusione e di integrazione.
Solo partendo dal sistema scolastico si può arrivare ad un concreto sviluppo sociale.

Keywords

Special Pedagogy; Special Didactics; School; Inclusion; Integration.

Pedagogia Speciale; Didattica Speciale; Scuola; Inclusione; Integrazione.

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Introduction

Knowledge in the field of learning is, for a teacher, the foundation on which to design the teaching activity, and an indispensable prerequisite to lead effective lessons. Every student, in fact, develops his own learning modality in different ways, with valuable and irreducible singularity, which must be taken into account for every subject to reach educational success by providing a personalized and individualized learning. The main theoretical fields in the research on learning are Behaviorism, Cognitivism and Constructivism. Behaviorism, the reference authors of which are J.B. Watson, I. Pavlov, E. Thorndike, and B. Skinner, sees learning as a result of new combinations between stimuli and behaviors in response to the stimuli themselves. It follows that a person who learns is essentially passive; the teacher designs activities according to cognitive and behavioral goals by adjusting the contents to the fixed standards, assessing the learning level in the students by means of summative and formative tests, and checking the validity of his teaching activity. He has control over his class, laying down rules and behavior patterns, without taking into account the personal characteristics of every student (motivation, self esteem, learning styles, etc.).

In contrast, the Cognitive approach, supported by authors such as C.Hull, E. Tolman, W. Kohler, K.J.W. Crick, G.A.Miller, E.Galanter, K. Pribram, U. Neisser, considers the subject as an active part in the learning process. Teaching does not only aim at conveying contents, but on understanding how this content can be encoded, stored and processed. So Cognitivist didactics tries to relate every disciplinary goal with a particular learning level by developing taxonomies, a hierarchical classification of learning, in which every level of cognitive processing is based on the complete mastery of the previous one, and is a prerequisite to the next. The teacher is the one who encourages new learning, making sure that students activate their pre-knowledge; In addition, he organizes the strategies aimed at promoting in the subject the ability to learn and organize knowledge contents in an independent and significant way. The Constructivists (L.S. Vygotsky, J. Piaget, J.Bruner, D. Merril), while agreeing with the idea of the centrality of the cognitive subject who learns, consider learning as an active process of knowledge construction, and not as a process of knowledge acquisition through clear strategies. Teaching activity and teacher are a support to this process. Moreover, learning is not a personal activity, it arises from the social and interpersonal communication and is linked to the concrete situation in which it takes place. The learning environment, according to the constructivists, becomes a lab where we learn to interact with others, supporting cognitive processes of problem solving and finding new problems to be faced and overcome, in an atmosphere of creativity, discussions and exchanges of viewpoints.

In the studies on the nature of learning, which follow the above-mentioned theories but that provide a major contribution (especially for educational purposes), is the pedagogical approach focused not only on the learner but also on the single differences, and it arises from the theory of multiple intelligences worked out by H. Gardner. According to the American psychologist, humans being have at least eight forms of intelligence of different grades, and combine and use them in personal ways. They are not static but change over time as a result of experiences. Therefore, every subject has his own intellectual profile which leads him to respond differently to mathematical, artistic, linguistic and other stimuli. So he assimilates content and knowledge through his own ways of learning. To a variety of learning styles and intelligences must correspond a variety of teaching strategies, in an approach aimed at valuing everyone's diversity and facilitating the development of collaborative and inclusive relationships. The implications of Gardner's theory, at the level of innovation and educational applications, are varied and concern different fields of the teaching-learning process. In particular, the enhancement of individual differences and the overcoming of obstacles related to learning (and not only) are embraced by pedagogy and special education, which put the special educational needs at the heart of their reflection process, for the school and social inclusion purposes. The ministerial directive of December 27, 2012, states that: "*The area of school disadvantage is much bigger than that referred explicitly to the presence of*

deficits. In every class there are students who submit requests for special attention for a variety of reasons: social and cultural disadvantage, specific learning disorders and/or specific developmental disabilities, difficulties arising from the lack of knowledge of Italian culture and language because of different cultural groups of belonging". In the varied panorama of our schools, the complexity of the classes becomes increasingly evident. This area of the school disadvantage, covering different issues, is indicated as Special Educational Needs area. […] Here three broad sub-categories are included: that of disability; that of the specific developmental disabilities and that of the socioeconomic, linguistic, cultural disadvantage. Therefore, Special Education and Special Pedagogy provide adequate responses to specific educational needs. Their special field of research is aimed at individuals who need adequate and appropriate interventions, and their task is to promote the development of the human potential for the achievement of autonomy, growth and full participation of the person in society".

1. The new perspective in Special Pedagogy

The new perspective of Special Pedagogy moves from new a terminology, which changes progressively from Handicap to Integration, and leaving room for those of Disability and Social Inclusion. The socio-cultural and pedagogical development leads to a new vision of disability, focusing on every individual's potentialities. The new international classification (ICF, 2001) is no longer focused on the disability, but, on the contrary, on every individual's resource, potentialities and wellbeing.

The new concept of educational culture is aimed at the enhancement of every diversity to support every individual's development and growth process. The object of investigation is the person, in his entirety and in his multidimensional system of relationships. The aim is to discover the potentialities of the individuals in their way of dealing with the life environment: every person has resources and abilities that need to be discovered so that they may develop and manifest themselves. The educational interventions must be designed to make the subject able to acquire self-consciousness, through the development of his potentialities referred to the socio-cognitive, emotional and affective dimensions. This is the prerequisite for the realization of the personal life project, understood as the need to live, to make sense to existence in order to self-design or self-choose independently through one's own identity.

Developing one's own life project is multidimensional as it includes all the subject's life aspects: the family, school, training, educational, cultural, and social one.

"Special Epistemology" aims at identifying the Special Needs by working out strategies to develop learning in view of an effective school and social inclusion, avoiding the creation of special places separated from the experienced contexts. In a disability there may be disorders that affect different areas of the cognitive, psychomotor or affective-relational development. The working method involves a number of interventions and of subjects, and is intended to support the student in carrying out his project of life according to an experimental approach, always ready to reshape itself and adapt to the special needs, but by always preserving the consistency with the educational and learning process of the students with disabilities (Trombetta & Rosiello, 2000).

2. The main Methodologies of Inclusive Didactics at school level

One of the main objectives of an inclusive learning approach involves the need to make all the students reach the highest level of learning and social participation possible. Obviously, in this perspective, it is not possible to ignore the enhancement of diversities within the group, including all the different and not just the more visible and marked ones in the student with a handicap or with a specific disorder.

In this respect, here below a table showing some of the didactic methodologies used for the inclusion of SEN students (Carlini, 2012; Halvorsen & Nearly, 2001).

Table 1: Inclusive Didactics methodologies

Methodologies and Didactics	***Theoretical Framework***	***Application in Education***
Metacognitive didactics	Cognitivism	Meta-cognitive didactics aims at making the student aware of his cognitive processes, and putting him in the position to control, choose and improve them. For this purpose, the teacher can choose activities with problematic situations that encourage discussion, exchanges of views and possible solutions, and that stimulate reflection on the steps to take to solve the problem.
Didactics for Integration	Gestalt psychology Systemic Theory of Communication (Palo Alto) Institutional Pedagogy	Didactics for integration is an educational work focused on the organization of the background elements, in order to support the processes of cognitive self-organization of the subjects being trained. The integrator background can be defined as a connecting structure, a container of experiences or rather a strategy that allows connecting and intertwining different skills and paths.
Didactic laboratories	Pedagogical Activism	Through the didactic laboratories, the teacher acts as a learning facilitator and stimulator, and helps students discover knowledge through the action-research method. In this way the student becomes an active knowledge builder, according to his own learning style and by using the different intelligences he has.

Source: our elaboration

Conclusion

In this research work were presented the main methodologies of inclusive didactics capable of promoting an inclusive process of the student with special educational needs in the school context.

A full inclusion of such people must always provide a synergistic development of learning and social integration; by making such this situation we design the bases for the formation of individuals able to exploit its own difficulties not only in the school but in any other social context.

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Strategie e Percorsi di Pedagogia e Didattica Speciale

Strategies and Paths of Special Pedagogy and Didactics

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Abstract

This research paper to support a thesis considered especially important today to the development of the inclusive qualities of the Italian school.
Being able to understand the situations of the students through the concept of Special Educational Need (SEN), based on the ICF classification, could allow our school making a significant step forward towards full inclusion.
In this regard we analyze the main strategies and paths of special pedagogy and didactics able to develop an individualized and personalized development plan for students with SEN. We also analyzes that the entire school system must be able to encourage the inclusion of these students.

Questo lavoro di ricerca intende sostenere una tesi ritenuta particolarmente importante, oggi, per lo sviluppo delle qualità inclusive della Scuola italiana.
Riuscire a leggere le situazioni degli alunni attraverso il concetto di Bisogno Educativo Speciale (BES), fondato su base ICF, potrebbe far fare alla nostra Scuola un significativo passo in avanti verso la piena inclusione.
A tal proposito si analizzano le principali strategie e percorsi di pedagogia e didattica specifici in grado di sviluppare un piano di sviluppo individualizzato e personalizzato per gli studenti con BES. Viene analizzato, inoltre, che l'intero sistema scolastico deve essere in grado di incoraggiare l'inclusione di questi studenti.

Keywords

Special Educational Need (SEN); Strategy; Special Didactics; Special Pedagogy; School Inclusion.

Bisogno Educativo Speciale (BES) Pedagogia Speciale; Didattica Speciale; Scuola; Inclusione Scolastica.

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Introduction

At school there has long been an approach to integration of students with disabilities, but we are still far from the inclusion, namely from recognizing and responding effectively to the individualization of all students who have some functional difficulties.

A school able to respond appropriately to all the difficulties of the students, and that knows how to prevent them, where possible, becomes a really and deeply inclusive school to all students, the barriers to everyone's learning and participation are broken.

This is the goal to strive for, a goal that is now well discussed in international scientific literature too (Booth & Ainscow, 2008). But what is the real utility of the concept of Special Educational Need? The concept of Special Educational Need is a macro category that includes all the possible educational-learning difficulties of the students, including both the situations considered traditionally as mental, physical and sensory disabilities, and those of specific clinically significant learning deficit ones, such as dyslexia, attention deficit, and other various situations of psychological, behavioral, relational, learning, social and cultural context- related problems, etc.

All these situations are very different between them, but, in their resounding diversity, there is something that makes them closer and substantially equal in their right to receive a sufficiently individualized and effective educational and didactic attention.

One might object that that it makes no sense to create a macro-category if there are individual categories comprising it. For example, isn't it sufficient to mention mental retardation, dyslexia, depression, etc.? To argue this point, let's go into detail of our reasoning. We must well differentiate our proposal for a fair reading of all students ' needs from a recognition-comprehension method for a problematic situation that operates through a clinical nosographic and etiological diagnosis, which detects the signs and symptoms and attributes them to a series of causes that generated them. This type of analysis is clearly useful, but it is a kind of identification that distinguishes students' difficulties based on their cause, in agreement with Law No. 104 of 1992 and the subsequent acts governing the allocation of additional resources to the school to cope with the students' difficulties; these give legitimacy only to the needs that have a clear foundation in the subject's body disability, a disability that must be stable or progressive. Other difficulties are less recognized, legitimated and protected.

A nosographic and etiological diagnosis is obviously fundamental to designing and implementing rehabilitative, therapeutic, preventive, epidemiological interventions, etc., but it does not help us establish real equity policies in our schools. It is a diagnosis that fragments, consolidates identities and categories, in which everybody is played off against each other in a chronic war among the poor for sharing the scarce resources available.

Instead, we need a wider, and therefore fairer recognition that does not distinguish between A-series needs, those evidently based on some bodily disability, from B-series needs, for which a bodily basis is unclear (or absent).

Fair policies are needed to recognize the real students' needs that go beyond the diagnostic labels. It may be that a student with a disastrous social and cultural situation has a much more complicated and functional operation (in a truly inclusive school) than the actual functioning of a student with Down' syndrome, who can boast a very strong chromosomal pedigree. However, the first student will not have, with current legislation and practice, the same protection and additional resources as those of his mate suffering from Down Syndrome, and this is not fair.

This division is the logical consequence of the cultural domain (which becomes political) of the most traditional medical model, where only the biostructural variables matter. But if the body works well, if it is not sick, can we say that the person enjoys good health and lives in a state of well-being?

According to the World Health Organization, health is not absence of disease but bio-psycho-social well-being, the full realization of one's own potential, one's own capability (Sen, 1994). This calls significantly into question social, cultural, economic, racial, religious (and so on) dimensions, which are not biostructural.

If we accept the dominance of the traditional medical model we will be forced to always look for a biostructural etiology or deny the status of actual illness or disturbance, to a problematic operation that is obviously not caused by physical disability or damage.

And what about the problematic situations of which we do not know the causes?

For a reading and acknowledgment of the real students' needs, we are more interested in understanding the current functioning situation, so to speak, "downstream" of some etiology. Thus understanding the interweaving of elements that now, here and now, makes up the functioning of that student in that series of contexts. At school, daily work is carried out with "downstream" functioning, with the most diverse interweaving of personal and social factors that, over time, make the functioning of even "equal" people (for some biostructural aspects) very different.

Are there two students with the same Down syndrome? Until many years ago it was thought so, because the dominance of the traditional medical model was absolute. Now it is no longer so and consequently we need to equip ourselves conceptually and with coherently legislative and implementing practices to give full identity and recognition to all forms of problematic functioning, irrespective of the origin.

Many forces are leading towards this direction. How many times have the Local Health Service's psychologists or neuropsychiatrists certified as disabled (according to Law 104 and the Guidelines of February 1994) students with other difficult situations? For these "unduly" extended and generous certification practices, cries of alarm have been raised... but cries of alarm of whom? Of whom does not want the "tide" of the support teachers to be too extended? Of whom wants to retain the "privileges" of the skills of students with traditionally protected disabilities? Of whom sees in the appeal to the easy certification the school's inability to deal with the students' difficulties with its own skills? Of whom sees in the easy certification the key mechanism for getting jobs? This increase in certifications has to make us think also that there are really many difficult situations for which a truly inclusive school must provide adequate resources for their individualization.

Another force that drives us in the direction we are hoping for is the strong and convinced diffusion that the WHO'S ICF model has been, and is still being spread enormously in Italy, more than other European countries.

The ICF model is radically bio-psycho-social, forcing us to consider the totality and complexity of people's functioning and not just the biostructural aspects. This is why our concept of Special Educational Needs (Ianes, 2005) was based on the ICF, which thus assumes a very different meaning from the one commonly used in the Anglo-Saxon literature. Ianes (2005) supports the importance of using the concept of Special Educational Needs in reference also to the psychopedagogical literature and legislation in the United Kingdom and partly in the United States, where it is widely used. From that analysis of various conceptualizations and normative texts it turned out that the concept of Special Educational Needs included all the various learning, behavioral and other difficulties/disturbances.

This enlargement and this official recognition are obviously positive in relation to our most restrictive biostructural legislation, but they are not yet sufficient as they do not include some forms of disability or particular conditions (such as being migrants and not speaking Italian,) which should instead be considered as a Special Educational Needs if we base this concept on the ICF's basic model of human functioning.

In Italy, the ICF has spread strongly in the world of education and in the School, thanks also to the fact that it has found a strong affinity with the Italian pedagogical culture and with its anthropological vision, which is very social and linked to the life contexts. This is not the same in other European countries, where the pedagogic culture has developed differently than ours, where the ICF is endangered by those who follow a cultural and social vision of the difficulties and disabilities because it is considered to be too "medical" wrongly (Terzi, 2008). In this regard, the State-Regions agreement, signed on March 20, 2008, on the global burden of students with disabilities, provides for the first time the use of the ICF as an anthropological model on which to carry out the functional diagnosis for students with disabilities: "The Functional Diag-

nosis is drawn up in accordance with the criteria of the bio-psycho-social model underlying the World Health Organization's ICF" (art.2, paragraph 2).

Therefore, it seems that the assumptions and conditions required to understand and deal with the concept of Special Educational Need are developing.

1. Intervention measures for SEN students

Students with disabilities are within an increasingly diverse context, where the traditional discriminating pair - disabled students/non-disabled students-does not reflect fully the complex reality of our classes. Indeed, it is appropriate to take an educational approach, for which the identification of students with disabilities is not based on any certification, which is certainly useful to a range of benefits and guarantees, but at the same time risks enclosing them in a narrow frame. In this connection, the contribution of the diagnostic model of the WHO's ICF (International Classification of Functioning), which considers the person as a whole, in a bio-psycho-social perspective, is relevant also in cultural terms. Relying on operational profile and on the context analysis, the ICF model helps identifying the student's special educational needs (SEN) regardless of exclusionary typings.

- *Special Educational Needs (SEN)*

The area of the school disadvantage is much bigger than the one that refers explicitly to the presence of deficits.

In every class there are students who require special attention for a variety of reasons (Ianes & Macchia, 2008):

- Social and cultural disadvantage;
- Specific learning disorders and/or specific developmental disorders;
- Difficulties caused by lack of knowledge of Italian culture and language, because of different cultures of belonging.

In the varied panorama of our schools, the complexity of the classes becomes increasingly evident.

This area of the school disadvantage, covering different issues, is referred to (as extensively analyzed) in the previous chapters as children' Special Educational Needs. It is considered appropriate to further specify that, in this area, three major subcategories are included:

1. Disability.
2. Specific developmental disorders.

For "specific developmental disorders" we mean, in addition to the specific learning disorders, also the language, non-verbal skills, motor coordination skills deficits, including – for the common origin in evolutionary age – even the attention and hyperactivity deficits, while the borderline intellectual functioning can be considered a borderline case between disability and specific disorder. All these different problems, included in the specific developmental disorders, are not or may not be certified according to Law n. 104/92, not conferring consequently right to benefits and measures provided for in the framework law itself, and among these, to the supporting teacher);

1. Linguistic, cultural, and socio-economic disadvantage.

Law n. 170/2010, in this context, represents a turning point as it opens up a different channel of educational care, materializing the study paths personalization principles enunciated in law n. 53/2003, in the perspective of the "taking charge" of the SEN student by every curricular teacher and the whole team of teachers involved, not only by the teacher for the supporting activities.

- Students with specific disorders

Students with normal intellectual or even high skills, who – for specific problems – may

have difficulties at school, must be supported to fulfill their potential. Among them, students with SLD (Specific learning Disorder) have been the subject of important regulatory measures, which have now established a well structured framework of rules aimed at ensuring their right to education.

However, it is worth noting that certain types of disorders, not dealt with by law n. 170/2010, provide the right to use the same measures provided for as they present specific problems in the presence of normal intellectual skills. In particular, it's about disorders with specific problems in the area of language (specific language disorder or – more generally-low verbal intelligence associated with high non-verbal intelligence) or, conversely, in non-verbal areas (as in the case of motor coordination disorder, dyspraxia, non-verbal disorder or– more generally-of low non-verbal intelligence associated with high verbal intelligence, if these conditions affect the realization of the student's potential), or other severe problems that may compromise the school path (such as a minor autism spectrum disorder, if not included in the cases provided for by law n. 104).

An educational approach, not merely clinical, as mentioned in the introduction, should allow identifying strategies and methods of intervention related to the special educational needs, with a view to a more inclusive and welcoming school, without any need for further regulatory clarification. In this regard, Law n. 53/2003 and Law n. 170/2010 are the primary reference standards to refer to for the initiatives to be taken in these cases (Canevaro & Ianes, 2002).

- Students with attention disorder and hyperactivity

A particular discourse should be made about students with attention and/or activity control disorders, often defined with the acronym A.D.H.D. (Attention Deficit Hyperactivity Disorder).

ADHD may also often be associated with a SLD or other problems; it has a neurobiological basis and causes difficulties in planning, learning and socializing with peers. It was estimated that this disorder, in such a serious form as to affect the school path, is present in about 1% of the school population, i.e. almost 80,000 students (Source: Italian Institute of Statistics).

With considerable frequency, ADHD is in co-morbidity with one or more disorders of the evolutionary age: Oppositional Defiant Disorder; Adolescent behavior disorder; Specific learning disorders; Anxiety disorders; Mood disorders, etc.

The best path for taking charge of the child/young guy with ADHD definitely starts when there is a synergy between family, school and clinics. The information provided by teachers play an important part for completing the diagnosis, and the collaboration of the school is a vital link in the rehabilitation process. In some cases, the particularly serious clinical situation – also for the co-morbidity with other diseases – requires the attribution of the supporting teacher, as provided for by law n. 104/92. However, there are many young boys with ADHD who, due to the lower gravity of the disorder, don't get the certification of disability, but have an equal right to have their educational success protected. Therefore, there is the need to extend the statutory measures provided for by law n.170 for students with specific learning disorders to all students with special educational needs.

- Borderline cognitive functioning

Students with non-optimal intellectual potentialities, described generally with the expressions of borderline cognitive (intellective) functioning, but also with other expressions (for example, mixed evolutionary specific disorder, code F83) and specific differentiations-if not included in the provisions of laws n.170-104 - require special consideration. It can be estimated there are around 2.5% cases in the whole school population, i.e. approximately 200,000 students. These are children whose global IQ (intelligence quotient) responds to a measure ranging from 70 to 85 points, and there are no peculiarities. For some of them the delay is related to neurobiological factors and is frequently in co-morbidity with other disorders. For others, it is only a mild form of difficulty for which, if properly supported and oriented towards school paths that are better suited to their characteristics, the subjects involved can carry out a normal life. Educational and didactic interventions have, as always and also in such cases, a crucial importance.

2. Strategic dynamics for the SEN

The above highlights, in particular, the need to develop an individualized and personalized path for students with special educational needs, including through the drafting of a personalized teaching plan, an individual plan or also a plan referred to all SEN children in the class, but which is articulated and serves as a working tool in progress for teachers and documents families about the planned intervention strategies.

Schools – with decisions adopted by the class council, resulting from the examination of the clinical documentation submitted by families and based on psycho-pedagogical and didactic considerations – may provide all SEN students with compensatory instruments and dispensatory measures provided for by law n. 170/2010 (M.D. n. 5669/2011).

The guidelines for the right to education of SEN students of 12 July, 2011, state the following:

- Documentation of the educational paths

Individualized recovery tasks, personalized teaching methods, as well as compensatory instruments and dispensatory measures should be made explicit and formalized by school in order to provide a useful tool for pedagogical continuity and for the sharing of the initiatives with the family.

In this respect, the school, in the forms considered appropriate and not exceeding the first trimester of school year, issues a document that must contain at least the following entries, articulated on the basis of the disciplines influenced by the disorder:

- Student's personal data
- Type of disorder;
- Individualized didactic activities;
- Personalized didactic activities;
- Compensatory Instruments used;
- Dispensatory measures adopted;
- Personalized forms of testing and assessment.

In the issuing of the documentation in question, the cooperation with the family is fundamental, which may inform the school about any observation on the experiences lived by the student independently or through extra-school paths. Based on these documents, within the limits of the current legislation, methods of testing and assessment are set out during the year or at the end of the cycle.

This documentation may take the form of a personalized didactic plan.

The guidelines on the school integration of disabled students of August 4, 2009, state the following:

- The educational and training co-responsibility of teachers

It is now a well-established belief that there is no inclusive education if there is no real co-educational widespread co-responsibility within it, and if there is no adequate teaching competence to develop a fruitful educational relationship with disabled students.

The design of interventions to be adopted involves all the teachers, because the whole school community is called to arrange the curricula according to different styles or of different cognitive skills, manage alternatively classroom activities, promote and strengthen learning and adopt the materials and teaching strategies in relation to the students ' needs. Not otherwise it would be possible for students to exercise their right to education, understood as educational success for all, so that the provision of non-differentiated instructional interventions immediately highlights a difference of treatment in the educational service for those who are not included in the concretely implemented educational and didactic practices. Consequently, the teaching staff will have to implement all the actions aimed at promoting the school and social inclusion

of disabled students, by including the inclusive choice of the educational institution in the School Programme, and by indicating educational practices that promote effectively inclusion (heterogeneous level groups, cooperative learning, etc.). Thus the class/Interclass councils will:

• Coordinate educational activities,

• Predispose materials

• Help the student with disabilities, on the basis of his wills and needs, full participate in the school life of his class.

All this implies working on three directions:

1) The classroom climate

Teachers need to take non-discriminatory behaviors, be attentive to everybody's needs, accept the differences showed by disabled students and enhance them as enrichment factors for the whole class, facilitate the structuring of the sense of belonging, build positive socio-emotional relationships.

2) The teaching strategies and tools

Educational planning oriented towards inclusion implies the adoption of favoring strategies and methodologies, such as:

- Cooperative learning,
- Work in group/pair
- Tutoring,
- Learning-by-discovering,
- Time partition,
- Use of educational mediators
- Use of computer equipment and aids,
- Use of specific software and subsidies.

It is worth mentioning the need for teachers to draw up the documents for studying or doing homework electronically, so that they can be easily accessible to students using supporting devices and computers to carry out their learning activities.

In this respect a widespread knowledge of new technologies for inclusive education, particularly in view of the potentialities offered by electronic textbooks, is useful. So it is important that curricular teachers, through the many specific centers dealing with these issues of the Ministry of Education and local authorities, acquire the knowledge necessary to support the activities of the student with disabilities even in the absence of supporting teachers.

3) Learning-teaching

An inclusive system considers the student as the protagonist of learning, whatever his abilities, potentialities and limits are. So the active construction of knowledge, occurring by activating the personal strategies of approach to "knowledge", by respecting the learning rhythms and styles and by "supporting" the self-regulation mechanisms, must be fostered. The use of the *cooperative learning methodology* is suggested.

Conclusion

This research work has enabled us to highlight the main strategic actions and development plans that are essential to guarantee an efficient program of Didactics and Special Pedagogy for students with Special Educational Needs (SEN). This analysis revealed the importance of putting in place in the school system a multidimensional action; In fact, on the one hand we must provide custom maneuvers to educate these students and on the other side it must instead be educated also all the stakeholders of the school system to promote a process of automatic inclusion in respect of all.

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