


# Visualisation and goal-setting in footballers

GLORIA GONZÁLEZ CAMPOS <sup>1</sup>, PEDRO VALDIVIA-MORAL <sup>2</sup> , JAVIER CACHÓN ZAGALAZ <sup>3</sup>, FÉLIX ZURITA ORTEGA <sup>1</sup>

<sup>1</sup> *University of Seville, Spain*


<sup>2</sup> *University of Granada, Spain*

<sup>3</sup> *University of Jaen, Spain*

## ABSTRACT

The footballer needs to utilise useful psychological tools along his/her sports career. The avatars footballers need to overcome when facing their tasks make them resort, in many occasions, to the search and use of psychological techniques, such as visualisation or goal-setting, which are going to influence their sports performance. The aim of this study is to analyse to what extent these psychological techniques of visualisation and goal-setting are used in footballers in terms of how they are applied and when they are used. The sample is made up of 25 footballers who play in the tenth group of the third division of the Spanish Football League. For the analysis of the use of visualisation and goal-setting, several scales from Psychological Characteristics Questionnaire related to Sports Performance (CPRD) as well as from LOEHR Psychological Sports Performance Inventory have been used. Some of the conclusions reached are that almost the entire team mentally trains to improve their performances, that this is done with clarity and that implementation proves to be easy. Moreover, more than half of the team uses the goal-setting technique, whose achievement depends on oneself. **Key words:** FOOTBALL, PSYCHOLOGICAL TECHNIQUES, VISUALISATION, GOAL-SETTING, QUESTIONNAIRES.

---

 **Corresponding author.** Faculty of Education. University of Granada, 18011, Granada (Spain).

E-mail: pvaldivia@ugr.es

Submitted for publication December 2015

Accepted for publication March 2016

JOURNAL OF HUMAN SPORT & EXERCISE ISSN 1988-5202

© Faculty of Education. University of Alicante

doi:10.14198/jhse.2016.112.01

## INTRODUCTION

Weinberg and Gould (1996), after carrying out many researches in the field of Sports Psychology, state that successful footballers share a high development of psychological skills and techniques. The avatars they have to overcome when facing their tasks make them resort to the search and implementation of psychological techniques, particularly visualisation and goal-setting.

These techniques have been selected for this study due to the importance they have for the sports performance of footballers, both for training sessions as for confronting the competition. Several national and international authors have already researched along the same lines (García and Díaz, 2010; Gimeno Buceta and Pérez-Llantada, 2001; González, 2013; González, Valdivia-Moral, Zagalaz and Romero, 2015; Sánchez-Oliva, Leo, Sánchez-Miguel, Amado & García-Calvo, 2012; Zurita-Ortega et al., 2014).

### **Visualisation**

The training based on the control of images, which are made up with imagination, is called visualisation. In football, it is considered to be helpful to stimulate optimal processes of adaptation before unexpected situations. Besides, it is essential for athletes to experience such circumstances of the game in an intense manner.

When sports excellence is pursued, Belén (2014) supports the use of practical techniques that improve sports performance and proposes training based on visual imagination with music; becoming a tool that renders a favourable environment of armony, and in turn, enhances this sports improvement. In this way, the author notes that creativity is used with objectivity.

Similarly, Olmedilla, Ortega, Ortín and Andreu (2008) implement a training programme based on breathing, relaxation and visualisation in 22 footballers, with the intention of testing the degree of satisfaction with this training. The programme responds to the improvement of technical-tactical aspects through the imaginative ability in the sports gesture.

Conversely, Reche, Cepero and Rojas (2013) conclude that elite athletes have a higher degree of visualisation than those who are not part of the elite. Likewise, Reyes, Raimundi and Gómez (2012) apply a module of visualisation control in three sessions in their research, concluding that this psychological technique significantly influences the improvement of the sports performance.

In football, visualisation is considered to be of great utility for stimulating processes of optimal adaptation in unexpected situations during a match and for athletes, it is essential to experience such circumstances of the game in an intense manner. The success of this type of training depends on the seriousness with which footballers assume these challenges (Ureña, 2005).

Nevertheless, after presenting an intervention programme to develop visualisation in footballers in order to optimise sports performance, De la Vega (2002) concludes that this technique is hardly used in this sport in spite of the fact that it develops a potentially essential ability to reach a high sports performance.

### **Goal-setting**

In the field of motivational psychology, one of the most used techniques to increase motivation in the sports domain is goal-setting. Weinberg and Gould (2010) note that goal-setting is a very powerful technique to increase performance.

García-Adrianzén and Refoyo-Román (2014) conclude that in collective sports, in addition to setting individual goals, it is key to establish team goals, since they promote group motivation, enhancing relationships and group cohesion.

When athletes have to face difficulties, if their expectations are favourable, players increase their efforts with a higher possibility of reaching their stated goals, whereas unfavourable expectations reduce such efforts, sometimes to the extent of completely ignoring the task (García and Díaz, 2010).

Moreover, Díaz-Ocejo and Mora-Mérida (2013) carry out a scientific review about the influence of some variables in the process of goal-setting in sports, such as proximity, specificity, difficulty and efficiency. The results show that there are consistent evidences in favour of efficiency in the use of this psychological technique for the improvement of performance in sport.

For their part, Ortín and Olmedilla (2001) used this technique to improve the performance in a group of semiprofessional footballers. The aim of that study was to provide the coach with information about the goals that players were determined to implement. Finally, the evaluation resulted in three aspects: the creation of a habit of self-assessment in players, a closer approach between coach and athlete and above all, addressing the player's attention towards the task, relying on themselves and not on the result.

Regarding the most relevant type of goal to footballers in pre-season, Díaz and García (2001) developed a study with 87 footballers from junior and senior categories in the community of Madrid, concluding that the most important goals for them are those related to the classification of the team, technical aspects and regularity in the game.

Likewise, Reyes, Raimundi and Gómez (2012) use the goal-setting technique in a study consisting of a three-session module of motivational level focused on advertising and training, concluding that this technique develops motivation as well as effort capacity.

Sánchez-Oliva, Leo, Sánchez-Miguel, Amado and García-Calvo (2012) analyse in a study conducted in 216 footballers whether the motivational atmosphere and self-determination in motivation have influence to predict prosocial or antisocial behaviours in the sports context. They conclude observing that the essential aspect is that the coach should create a task-oriented atmosphere, as it is stated in the Achievement Goal Theory (Nicholls, 1989), making it necessary to put into practice motivational techniques.

### ***Aims***

After the presented literature review, the following research question arises; do assessed footballers use visualisation and goal-setting? In this way, once the variables displayed in this study have been analysed and the research question has been made, the aim of this work is to analyse the use of the psychological techniques of visualisation and goal-setting in a team of semiprofessional footballers.

## **MATERIALS AND METHODS**

### ***Design and Participants of the research***

This research is developed within a major study analysing the psychological variables that influence sports performance in footballers belonging to a semiprofessional football team. A non-probability convenience sampling is conducted due to proximity and accesibility to the sample. Additionally, it is emphasised that results obtained in this study cannot be applied indiscriminately since the sample is not representative. The

group of subjects under study is made up of 25 footballers who play in the tenth group of the third division in the Spanish professional Football League, being at the same time the reserve team of a club of the First Division in the Spanish professional Football League. Footballers belong to different provinces of Anadaluia except for one, who is from a South American country. The ages range between 17 and 24.

### **Instruments**

In order to analyse both visualisation and goal-setting techniques used by such footballers, the mental skills scale from the Psychological Characteristics Questionnaire related to Sports Performance (CPRD) by Buceta, Gimeno and Pérez-Llantada (1994) and the scale of control of visualisation and images of LOEHR Psychological Sports Performance Inventory (1982), Spanish version by Cernuda (1988) have been used.

CPRD is integrated by 55 items distributed in five scales: stress control, influence of performance evaluation, motivation, mental ability and team cohesion. The answers are given in a Likert-type scale varying from “fully disagree” (value 1) to “fully agree” (value 5), with the inclusion of an additional answer option “I do not understand”, for those cases in which the athlete does not understand the meaning of the item.

The mental skill scale comprises data about visualisation and goal-setting, of which four items have been selected for the analysis of visualisation and two for goal-setting. A high scoring in this scale shows that the athlete has enough resources to reach an optimal sports performance.

LOEHR consists of 42 items distributed in seven scales: self-confidence, control of negative energy, attention control, visualisation and images control, motivational level, positive energy and attitudes control. Each scale comprises 6 items. The answers are given in a 5-point Likert-type scale from “nearly always” (value 1) to “hardly ever” (value 5). For this study, the scale of control of visualisation and images has been selected, which analyses how athletes use the visualisation technique as a mental training strategy.

### **Procedure**

For the completion of CPRD, a copy was distributed to each one of the team players just before the beginning of a training session, during the first week of the early pre-season stage. Specifically, the specialist in Sports Psychology, belonging to the team’s technical body handled the questionnaires, explaining the steps to follow for its completion.

Two days later, following the same procedure, LOEHR was completed.

All the participants were informed of the aim of the study and the absolute confidentiality of the answers provided, as well as the later data management, with the ultimate purpose of their individual and collective improvement. Additionally, all participants agreed to be part of the study once they had been informed. In the case of those who were underage, parents consent was provided.

## **RESULTS**

The statistical analysis carried out gives an answer to the objectives of the research. To this end, the descriptive statistics is presented in frequencies and percentages for each one of the items of the analysed subscales.

The software Statistical Package for Social Sciences (SPSS) 21.0 version for Windows, was used.

**CPRD Results**

Next, the results based on subscales of visualisation and goal-setting described in frequencies and percentages are shown. Table 1 presents the results of the mental ability scale according to the visualisation subscale.

Table 1. Mental ability scale according to the visualisation subscale.

Scale: Mental Ability Visualisation		Frequency and percentage					
N.	Item	1	2	3	4	5	I don't understand
7	I often mentally rehearse possible executions to perform during the match, just before a competition.	n 0	2	2	10	11	0
		% 0%	8%	8%	40%	44%	0%
23	When I mentally practice what I have to do, I visualise myself doing it as I would be looking at myself in front of a monitor	n 2	1	4	5	12	1
		% 8%	4%	16%	20%	48%	4%

25	As I get ready to participate in a test, I try to imagine what I will see, do and feel as real situations.	n	1	1	4	11	8	0
		%	4%	4%	16%	44%	32%	0%
48	I do not mentally rehearse situations that I must correct or improve as part of my training plan.	n	15	3	6	0	1	0
		%	60%	12%	24%	0%	4%	0%

Note. Values of the scale: 1) Fully disagree; 2) Disagree; 3) Irrelevant; 4) Agree; 5) Fully agree.

The results show that 84% of players agree and fully agree that just before a competition, they often mentally rehearse possible executions to perform during the match.

Moreover, 76% agree and fully agree that as they get ready to participate in a test, they imagine what they will see, do and feel as real situations using visualisation as previous training before a match.

Table 2 shows the results of the mental ability scale according to the goal-setting subscale.

Table 2. Mental ability scale according to the goal-setting subscale, based on items 37 and 50.

Scale: Mental Ability		Frequency and Percentage					
Goal-Setting		Percentage					
N.	Item	1	2	3	4	5	I don't understand
37	I usually set goals whose attainment entirely depends on myself, instead of targets that do not only depend on myself.	n 2	2	6	9	6	0
		% 8%	8%	24%	36%	24%	0%
50	I usually set key goals before each training session and each competition.	n 0	1	8	8	8	0
		% 0%	4%	32%	32%	32%	0%

Note. Values of the scale: 1) Fully disagree; 2) Disagree; 3) Irrelevant; 4) Agree; 5) Fully agree.

The gathered results based on frequency and the extracted percentage are as follows:

According to the goals set by players, 60% state that they agree and fully agree that they usually choose objectives whose attainment depends entirely on themselves. With respect to goal-setting before training sessions and competition, 64% point out that they agree and fully agree that they do use this technique, and 32% highlight that they sometimes set their own goals whereas in other occasions they do not.

**Results of LOEHR**

Table 3 displays the analysis of the scale control of visualisation and LOEHR images.

Table 3. Scale control of visualisation and images, according to items 4,11,18,25,32 and 39.

Scale: Control of visualisation and images		Frequency and Percentage					
		1	2	3	4	5	
N.	Item						
4	Before the competition, I often imagine myself executing and performing perfectly.	n	11	11	1	0	1
		%	46%	46%	4%	0%	4%
11	I mentally practice my physical skills.	n	3	8	9	2	2
		%	13%	33%	38%	8%	8%
18	It is easy to imagine myself practicing my sport.	n	17	7	0	0	0
		%	71%	29%	0%	0%	0%
25	Before the competition, I visualise myself overcoming difficult situations and executing complex actions.	n	7	9	8	0	0
		%	29%	38%	33%	0%	0%



32	During the competition, I use mental imagery as training for better performance.	n	6	5	11	1	1
		%	25%	21%	46%	4%	4%
39	When I imagine myself in a competition or a training session, I am able to see and feel things in a clear manner.	n	11	10	1	2	0
		%	46%	42%	4%	8%	0%

Note. Values of the scale: 1) Nearly always; 2) Often; 3) Sometimes; 4) Occasionally; 5) Hardly ever.

The analysis of the results based on frequency and the percentage extracted of each item point out the following issues:

92% of footballers nearly always and often imagine themselves executing and performing perfectly before the competition. With respect to the analysis of the use of this technique for the improvement of physical skills, 46% state that they nearly always and often use this technique, although 38% confirm that they use it from time to time.

In general, visualisation is easy to apply in 100% of players. Additionally, 67% nearly always and often visualise themselves overcoming difficult situations and executing complex actions. Besides, 46% put forward that nearly always and often use mental imagery as training for better performance whereas the same percentage use it only at times.

## DISCUSSION

The results of this study suggest that most of athletes surveyed use the visualisation technique and they establish goals for themselves. Gimeno (1999) carried out a research with a sample made up of 108 footballers from a 1st division football club reserve team, with ages ranging between 11 and 18, collecting important data with the intention of giving advice to coaches about the possible interventions in these psychological techniques. In our study, after applying this tool, relevant answers were also obtained with respect to visualisation and goal-setting, which were offered to the coach in order to promote the personal improvement of each one of the team members.

In the same line of research, Olmedilla, Ortega, Andreu and Ortín (2010) ran a psychological training programme dealing with learning psychological techniques with 22 footballers ranging from 14 and 18 years. The goal was to learn about the use of visualisation in these footballers and therefore optimise technical and tactical aspects both in training sessions and competition. The results showed that visualisation was the most applied psychological technique by footballers. Similarly, footballers evaluated in our study also use this technique before and during competition.

According to a comparative study conducted by Lavarello (2005) between two groups of footballers in the same age group, made up of 125 children and junior players (ages from 13 to 19) from two Chilean first division teams, it is concluded that there are no big differences between the two group of players. It is only underlined that except for the motivation scale, where children score higher, in the remaining as it is in the scale related to mental skill, which is the one collecting the variables of visualisation and goal-setting, higher score is reached by the junior team. It is noted that in our study, the highest scorings are not obtained in the application of these psychological techniques under study.

Pacheco and Gómez (2005) develop a study with 49 footballers from Bolivia belonging to three professional teams. This study specifies which ones of the psychological variables obtained after the analysis of the CPRD, most influence the sports performance of players based on their positions. According to such study, goalkeepers show the mental ability (development of visualisation and use of goal-setting) as the most influential skills in sports performance. In our study, three goalkeepers were studied, out of which only one presents higher scoring in mental ability when applying these techniques. Another goalkeeper presents this variable in a second position. Nevertheless, our third goalkeeper shows his lowest scoring in mental ability. With respect to forwards, the Bolivian study shows mental ability as the second psychological variable. Our study addresses eight forwards, one of which presents the highest scoring in mental ability, three of them present a high scoring, and another one in a different variable.

Llames (2003) studied the relationship between the psychological variables and the sports performance in 98 football players, with an average age of 18, belonging to three teams from Real Oviedo S.A.D. The sample was divided into two groups: performance players and non-performance players. For the assesment of the psychological profile of footballers, the autor drew on LOEHR, whose instrument is determined by different qualitative levels of psychological assesment by scales. The levels are the following: low, up to 19 points; medium, 20-25 points; high, 25-30 points. Thus, bringing the 98 players of this research together in an only group and making a comparative study with our research, it can be seen that in the scale of control of visualisation and images, athletes from Oviedo present a 39.8% of players in the medium level (between 20-25 points) and in our study, 54.1% of the team scores in this same level.

Last, Morilla (2009) carries out a linear study with footballers from season 1998/1999 to season 2005/2006, consisting in the use of an integral psychological programme whose aim is to improve sports, social and institutional aspects among players, coaches and managers of sports clubs. The population under study is made up of 435 footballers within the age group from 9 to 35 years and belonging to the teams of Sevilla F.C. For the analysis of the psychological variables, the author used LOEHR, whose levels are: low, up to 19 points; medium, 20-25 points; high, 25-30 points. Comparing both studies with respect to the use of the psychological technique of visualisation, the study from Sevilla scores with 24.3, whereas ours almost fully coincides with what has been exposed, represented with an average of 24.1. Both populations coincide within the medium level.

The discussion in this research reveals that these techniques are not considered by very young footballers maybe because they do not know them. However, from junior categories on, these techniques are already utilised, although not all players use them very much.

## CONCLUSIONS

The use of the visualisation technique is seen as easy to apply for all players in the study, pointing out that actions are felt with clarity.

Almost all the team mentally trains before competition matches to rehearse physical and technical aspects to be improved.

More than half of footballers, when using this technique, visualise themselves as if they saw themselves reflected on a screen.

There are three different subgroups as follows: one of them uses the technique of goal-setting for training sessions and competition; another one, to improve their sports career; and the third one states that sometimes they set themselves goals but in some other occasions they do not.

More than half of the team establishes goals whose attainment depends exclusively on themselves, although there is also a player who confirms that he neither usually sets himself goals for preparation actions nor for competitive events.

### **Proposals for improvement**

According to the results of this study, the introduction and guide of the psychological techniques of visualisation and goal-setting is proposed for some footballers of this team, as well as the support and progressive reinforcement of such techniques in the remaining players.

## ACKNOWLEDGEMENTS

This study has been financially supported by the research teams HUM-507 (University of Seville) and HUM-653 (University of Jaen).

## REFERENCES

1. Belén, M. (2014). Entrenamiento en imaginación visual con música para la adquisición o mejora de la técnica deportiva. Una propuesta. *Lecturas, Educación Física y Deporte. Revista Digital*, 190. From <http://www.efdeportes.com/efd190/entrenamiento-en-imaginacion-visual-con-musica.htm>
2. Buceta, J. M., Gimeno, F., & Pérez-Llantada, M. C. (1994). *Cuestionario de Características Psicológicas relacionadas con el Rendimiento Deportivo (CPRD)*. National Distance Education University (Unpublished).
3. Cernuda, A. (1988). *Versión Española del Inventario Psicológico de Rendimiento Deportivo* (LOEHR, 1982). Madrid: Spanish Sports Technification Programme. High Council for Sports.
4. De la Vega, R. (2002). Desarrollo de un programa de entrenamiento en visualización/imaginación con futbolistas. *Lecturas, Educación Física y Deporte. Revista Digital*, 46. From: <http://www.efdeportes.com/efd46/visual.htm>

5. Díaz, J. F., & García, A. (2001). Evaluación de metas en jugadores de fútbol de categoría juvenil y absoluta. *Revista de Psicología del Deporte*, 10(2), 211-223.
6. Díaz-Ocejo, J., & Mora-Mérida, J. A. (2013). Revisión de algunas variables relevantes en el establecimiento de metas deportivas. *Anales de Psicología*, 29(1), 233-242.
7. García, A., & Díaz, F. (2010). Relación entre optimismo/pesimismo disposicional, rendimiento y edad en jugadores de fútbol de competición. *Revista Iberoamericana de Psicología del Ejercicio y el Deporte*, 5(1), 45-60.
8. García-Adrianzén, D., & Refoyo-Román, I. (2014). Establecimiento de metas y la relación entre las expectativas de éxito y el rendimiento en un equipo de fútbol profesional. *Kronos*, 13(1).
9. Gimeno, F. (1999). *Variables psicológicas implicadas en el rendimiento deportivo: Elaboración y estudios sobre la aplicación del cuestionario "Características Psicológicas relacionadas con el Rendimiento Deportivo" (CPRD)*. PhD Thesis. Madrid: National Distance Education University.
10. Gimeno, F., Buceta, J. M., & Pérez-Llantada, M.C. (2001). El cuestionario "Características Psicológicas Relacionadas con el Rendimiento Deportivo" (CPRD): Características psicométricas. *Análisis Psicológica*, 1(19), 93-113.
11. González, G. (2013). *Análisis de las variables psicológicas relacionadas con el rendimiento deportivo en jugadores de un equipo de fútbol semiprofesional*. PhD Thesis (Unpublished). University of Seville.
12. González, G., Valdivia-Moral, P., Zagalaz M. L., & Romero, S. (2015). La autoconfianza y el control del estrés en futbolistas: Revisión de estudios. *Revista Iberoamericana de Psicología del Ejercicio y del Deporte*, 10(1), 95-101.
13. Lavarello, J. (2005). Estudio comparativo de los niveles medidos por el CPRD entre dos grupos etáreos de las divisiones menores de dos equipos de fútbol de primera división. *Educación Física y Deportes. Revista Digital*, 84. From: <http://www.efdeportes.com/efd84/cprd.htm>
14. Llames, R. (2003). *Variables psicológicas y rendimiento deportivo en el fútbol*. PhD Thesis (Unpublished). University of Granada.
15. Loehr, J. E. (1982). *Athletic Excellence: Mental Toughness Training for Sports*. New York: Forum Publishing Co.
16. Morilla, M. (2009). *Mejora de aspectos psicológicos, deportivos e institucionales mediante el desarrollo y aplicación de un Programa de Trabajo Psicológico en un club de fútbol*. PhD Thesis (Unpublished). University of Seville.
17. Nicholls, J. G. (1989). *The competitive ethos and democratic education*. Cambridge: Harvard University Press.
18. Nunnally, J. C. (1978). *Psychometric Theory*. New York: McGraw-Hill.
19. Olmedilla A., Ortega E., Andreu M. D., & Ortín F. (2010). Programa de intervención psicológica en futbolistas: Evaluación de habilidades psicológicas mediante el CPRD. *Revista de Psicología del Deporte* 19(2), 249-262.
20. Olmedilla, A., Ortega, E., Ortín, F.J., & Andreu, M. D. (2008). Entrenamiento psicológico en fútbol base de élite: Percepción de aplicabilidad e índices de satisfacción. *Revista Iberoamericana de Psicología del Ejercicio y el Deporte*, 3(1), 31-46.
21. Ortín, F. J., & Olmedilla, A. (2001). El establecimiento de objetivos como herramienta para la mejora del rendimiento deportivo en los deportes de equipo: Un caso en fútbol semiprofesional. *Cuadernos de Psicología del Deporte*, 1(1), 91-100.
22. Pacheco, M., & Gómez, J. (2005). Características psicológicas y rendimiento deportivo. Un estudio en jugadores bolivianos de fútbol profesional. *Ajayu*, 3(2), 1-26.

23. Reche-García, C., Cepero-González, M., & Rojas-Ruiz, F. J. (2013). Consideraciones en el entrenamiento de habilidades psicológicas en esgrima. *Cuadernos de Psicología del Deporte*, 13(2), 83-88.
24. Reyes, M., Raimundi, M. J., & Gómez L. (2012). Programa de entrenamiento en habilidades psicológicas en jugadoras de voleibol de alto rendimiento. *Cuadernos de Psicología del Deporte*, 12(1), 9-16.
25. Sánchez-Oliva, D., Leo, F. M., Sánchez-Miguel, P. A., Amado, D., & García-Calvo, T. (2012). Antecedentes motivacionales de los comportamientos prosociales y antisociales en el contexto deportivo. *Revista Internacional de Medicina y Ciencias de la Actividad Física y el Deporte*, 12(46), 253-270.
26. Ureña, P. (2005). Aplicaciones del sistema de eslabones de Puni a la preparación psicológica de un equipo de fútbol ante competiciones concretas. *Revista en Ciencias del Movimiento Humano y Salud MHSalud*, 2(1), 1-11.
27. Weinberg, R. S., & Gould, D. (1996). *Foundations of sport and exercise psychology*. Champaign, IL: Human Kinetics.
28. Weinberg, R., & Gould, D. (2010). *Fundamentos de Psicología del deporte y el ejercicio físico*. Madrid: Panamericana.
29. Zurita-Ortega, F., Fernández-García, R., Cachón-Zagalaz, J., Ambris-Sandoval, J., Zaleta-Morales, L., & Hernández-Gallardo, D. (2014). Satisfacción y autoestima en jugadores de futbol base en relación con los estilos de enseñanza que reciben de los entrenadores de Ciudad del Carmen (México). *Journal of Sport and Health Research*, 6(1), 63-74.