

GAME FOR LIFE FRAMEWORK

REAL MADRID FOUNDATION TECHNICAL ACADEMY IMPACT ANALYSIS REPORT

SEPTEMBER 2015

Introduction

Real Madrid Foundation Technical Academy implemented the Game for Life (GFL) Framework in their football academy's curriculum to be more deliberate in inculcating values through their football lessons. To determine whether the Game for Life framework was effective in integrating values inculcation into their existing football curriculum, Sport Singapore (SportSG) undertook an impact analysis study in conjunction with Real Madrid Foundation Technical Academy as part of its GFL implementation.

The impact analysis study was grounded on Kirkpatrick's well-established four levels of training evaluation model (Kirkpatrick & Kirkpatrick, 2006), which describes training effectiveness in terms of how individuals reacted, learnt, applied and demonstrated results as a result of receiving training. Figure 1 illustrates how the Kirkpatrick training evaluation model is applied in the context of this study.

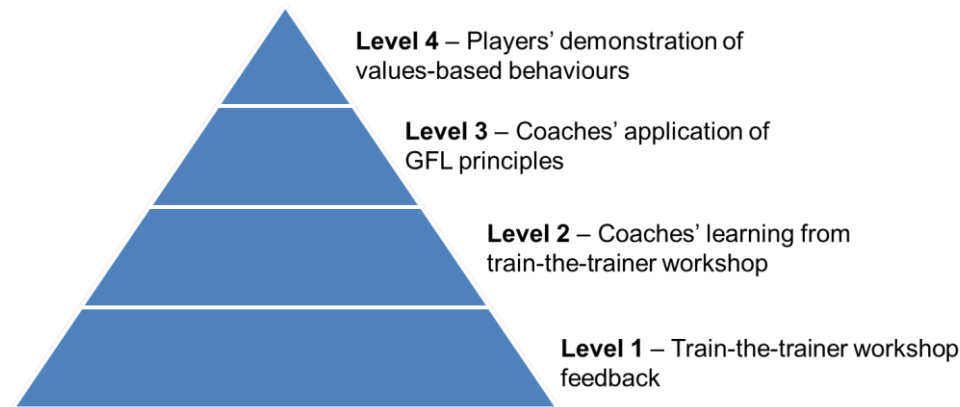


Figure 1. Application of Kirkpatrick's training evaluation model in this study.

Research Design

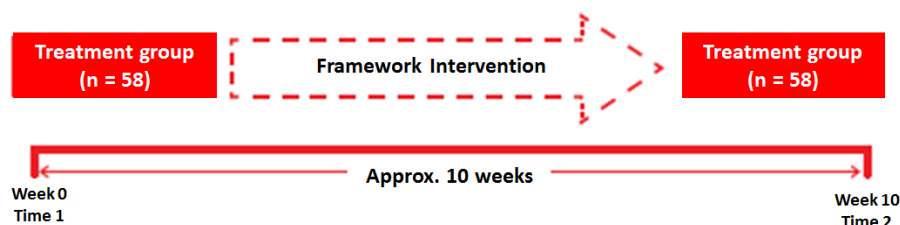


Figure 2. Research design for the impact analysis study.

The impact analysis study employed a pre-post research design (see Figure 2). The study followed the timeframe of a standard coaching term of approximately ten weeks, with a total of 58 participants, aged between 10 to 16 years old, receiving 'the framework intervention' as part of their football lessons. Measures were collected at time 1 (T1) prior to the start of the first lesson of the coaching term and at time 2 (T2) which is after the last lesson of the coaching term.

Hypothesis

If the framework is effective, it is expected that:

Hypothesis 1 – coaches apply the framework principles more frequently at time 2 than at time 1;

Hypothesis 2 – players demonstrate values-based behaviours more frequently at time 2 than at time 1.

Instrument Development

Measures for (Kirkpatrick training evaluation) level 1 workshop feedback and level 2 coaches' learning were collected through generic feedback from the coaches after the workshop and through the submissions of sample lesson plans to SportSG prior to the start of the study. The intent of these measures is to gather feedback about the conduct of the workshop and to ensure the coaches took away the essential learning of applying the framework in their football lessons. These results will not be discussed here.

Two scales were developed to measure level 3 coaches' application of the framework principles and players' demonstration of values-based behaviours, forming the impact analysis instrument. The first measure is a 15-item values inculcation practices scale that measures the frequency to which coaches applied the various principles and practices in their football lesson. These items measure the extent to which coaches identify, define, model, shape and reinforce values-based behaviours during the football lessons (e.g. "During the football lessons, my coach explains how certain values can be demonstrated"). The second measure is a 15-item players' values scale that measures the frequency to which players demonstrated values-based behaviours during their football lessons (e.g., "I accepted my role in the team and fulfilled it to the best of my ability"). This scale was adapted from the Prosocial and Antisocial Behaviour in Sport scale developed by Kavusannu and Boardley (2009) and contextualised to measure core values of respect, responsibility and solidarity. Both measures used a 5-point Likert scale, ranging from 1 = Never to 5 = Very often. Both scales were tested for reliability and validity¹, and results revealed that both scales demonstrated good reliability and validity.

Data Collection and Ethics Considerations

Players were briefed on issues of confidentiality and informed consent. Specifically, players were briefed that although they were required to indicate their names in order to match time 1 and time 2 data, they were assured that their responses would not be revealed to their coaches for any assessment purposes. Regarding informed consent, players were explicitly explained to that the research was entirely voluntary and they were welcome to withdraw from the study at any point.

All measures were administered via a paper-and-pencil survey. Data were collected within each class in a large group setting, where players were told that the data were collected as part of a research project to gather feedback about their football lessons. Through the survey, players rated the extent to which their coaches applied values inculcation principles identified by the framework during their football lessons and the extent to which they demonstrated values-based behaviours during their football lessons.

¹ Cronbach's Alpha and Exploratory Factor Analysis (EFA) were conducted to test for scale reliability and factor structure.

In addition, to gain a deeper understanding of the experiences from football training sessions, qualitative data was also collected in the form of semi-structured interviews with a sample of 8 players, 4 parents and 2 coaches. The manner in which questioning took place consisted of the interviewer asking a fixed set of questions but also allowed room to further probe and ask follow-up questions, which made it possible to obtain rich, in-depth responses from multiple perspectives. Each interview lasted approximately 10-15 minutes in length, were video and audio recorded, then transcribed into text.

Quantitative Results

Hypothesis one predicted that coaches applied the framework principles more frequently at time 2 as compared to time 1. See Figure 3 for a graphical representation of the results. Overall, results revealed there was an increase in the frequency of the coaches' application of framework principles at time 2 than at time 1², with players observing their coaches to be modelling values-based behaviours significantly more frequently at T2 than at T1³. This meant that it was consistently felt amongst the players that there was an increase in the coaches showing how to demonstrate certain values, giving examples of values-based behaviours and sharing stories that exemplified certain values.

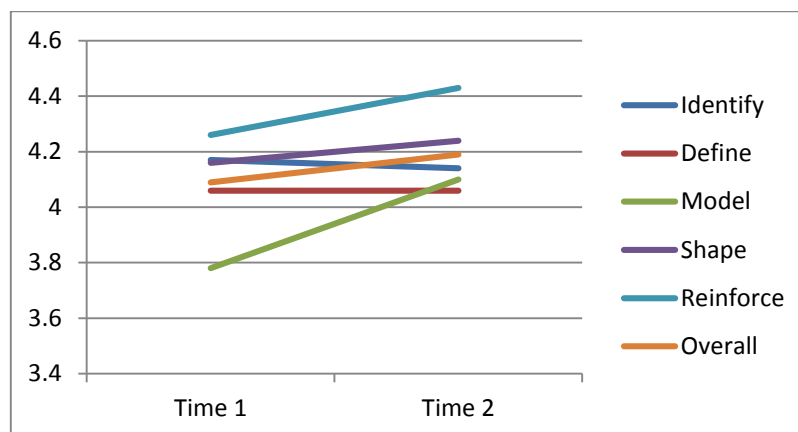


Figure 3. Results for coaches' application of the framework principles.

² A repeated measures t-test was performed to determine whether coaches significantly applied the framework principles more frequently at time 2 (mean = 4.19) than at time 1 (mean = 4.09; $t = -1.38$, *ns*).

³ A repeated measures t-test was performed to determine whether coaches modelled values-based behaviours more frequently at time 2 (mean = 4.10) than at time 1 (mean = 3.78; $t = -2.87$, $p < .01$).

Hypothesis two predicted that players demonstrated values-based behaviours more frequently at time 2 as compared to time 1. See Figure 4 for a graphical representation of the results. Overall results revealed an increase in players' demonstration of values-based behaviours at time 2 than at time 1⁴, with players perceiving themselves to demonstrate significantly more responsible behaviours at time 2 than at time 1⁵. This meant that players had a higher tendency to place team goals ahead of their individual goals, being more accountable for their actions, more accepting of their role in the team and fulfilling it to the best of their abilities, and being more willing to improve themselves so that they can contribute more actively to team goals.

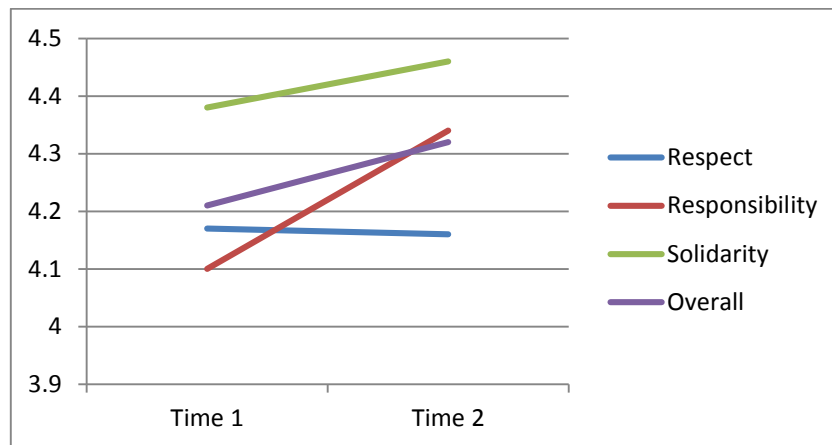


Figure 4. Results for players' demonstration of values-based behaviours.

Additional analyses were performed to explore the possibility of decreasing levels of actual skill development and enjoyment of football during lessons that were integrated with the framework. To address this concern, players were asked "How much did you enjoy learning during football lessons?" and "How confident are you now in playing football?" using a 5-point Likert scale (1 = Not at all to 5 = Very much) during data collection at time 2. Results revealed a positive relationship between skill development, enjoyment and coaches' application of the framework principles⁶. In other words, the more frequent coaches facilitated values inculcation through the framework during football lessons, players perceived greater levels of enjoyment and actual football skill development.

⁴ A repeated measures t-test was performed to determine whether players significantly demonstrated values-based behaviours more frequently at time 2 (mean = 4.32) than at time 1 (mean = 4.10; $t = -1.59$, *ns*).

⁵ A repeated measures t-test was performed to determine whether players significantly demonstrated responsible behaviours more frequently at time 2 (mean = 4.34) than at time 1 (mean = 4.10; $t = -2.84$, $p < .01$).

⁶ Bivariate correlations were performed to determine the relationship between player enjoyment and skill development during sports lesson and coaches' application of the framework principles. Correlations ranged between .27 and .31 ($p < .05$).

Qualitative Results

To obtain a complete understanding of the perspectives and experiences reported during the interviews, a content analysis was performed on participants' responses which identified any patterning of recurring themes and relating variables. A summary of themes identified from the interviews with the parents, coaches and players are outlined in Figure 5.

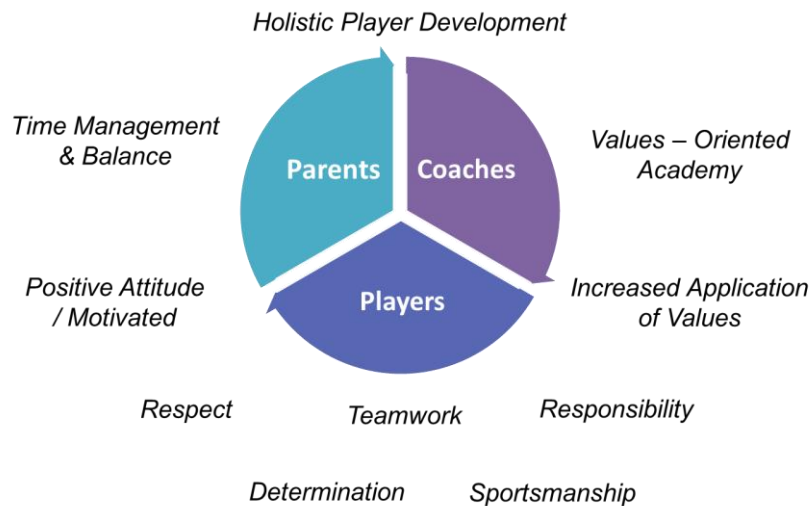


Figure 5: Summary of Themes from Interviews

In terms of the **application of the GFL framework principles** during football training sessions, interview responses from both the coaches and players provided supportive evidence of an understanding and increased application of focus of values & attributes, identifying developmental platforms and an effort of a purposeful action plan during training sessions.

Normally, we talk about values, even before this project, but honestly after seeing the objective of this project, we're more focused on putting values into our sessions...So it has changed a bit of our way of planning the lessons. Now based on respect, responsibility and solidarity, we have to manage the exercises...I think the key point is to ask the players if they have realised about that value at that moment. At the end of the exercise you have to ask them if they have learnt the value properly, but it's not only about learning the value you have to put into practice later, not only on the pitch but also in real life...by asking them at the end and making sure that all of them understand. (Coach 1)

For example, in the stretching time when I came here, I was doing the stretching all the time. But now I order... I say some people, especially the shy people for example "you will be the leader in the stretching time" and he has to improve his communication skills. In a training session, I think it's a good opportunity, for example to say, 2 captains, not always the same person... And they can manage his own team and putting in different position the players, and I think it's a good way to grow, for example responsibility, their communicative skills, even the leadership, and these kinds of values. (Coach 2)

I've been going for training about a year and I've been improving like every single day since I enrolled. And the coaches teach us life values and how is related to our attitude and behaviour, so I think that really helps us in our future. (Player 2)

There is greater emphasis on teamwork compared to last time. It's more asking to work with your teammates more than just taking the ball. It's like thinking about the team before yourself, there is slightly more emphasis on that. In the exercises there's more possession games and also emphasis on passing - more teamwork based and not just doing it yourself. (Player 8)

The coaches also echoed the academy's coaching philosophy, which emphasised more on the development of "people" rather than winning. This was further reinforced by observations from the parents about the academy's focus on the holistic development of the player rather than pure football skills.

In Spain there are teams who are focused on people, players and then trophies, and sometimes in other academies the order is opposite. Here our order is completely clear, first, people and then trophies. Trophies are not important to us. (Coach 2)

With Real Madrid, we found that the coaches were a lot more focused on the child and the skills. Is not about winning games, it's about the skills that you develop to become a better footballer...I think they emphasis a lot about teamwork, on understanding what your strengths are, where you can try to build up or where your weaknesses are, and they are very open about how the children can develop... With the kids, they talk to them at the end of the session, which means sort of putting a wrapper around the game, around what they doing, what the need to do as a team, and what they need to do individually (Parent 2)

In terms of players' **demonstration values-based behaviours**, themes picked out from responses of players' behaviours from both the players themselves and the parents attributed to values of respect, teamwork, responsibility, determination and sportsmanship. A more positive attitude and better time-management was also observed by parents.

What I most want to develop is responsibility...For example if I'm not playing well I just want to kind of stay away from the ball and not be in the middle of the game. So I kind of want to improve that so that I can feel like I can... like my teammates can trust me and I can give more to the team. (Player 1)

Now we are more motivated and we have more confidence in ourselves, and our coaches tell us that it's not all about football, and it's also about studies. So we have to balance both so that we could be better at both. (Player 2)

There was this friendly, where we were actually beat the team 10-1 at the final whistle. After I scored those goals, I was starting to get a little bit arrogant, where we started doing these celebrations that were very flashy. Then at the end of the game coach told us "you need to show some respect to the opponent. When you score a goal you can do your crazy celebration after your 1st and 2nd goal, but beyond that will be abit too arrogant, abit too overconfident" and it would throw us off our game. It's something that really impacted on me. So each time I try to score a goal I try to tone down now. (Player 5)

It has helped me in academics also...Ever since I joined actually was more determined. Before I joined, I was just half-hearted, and then after I joined I was more motivated to study. (Player 8)

I think it helps him in life... he has a positive way of looking at things, because we are also new to this country, it has been a huge change for us. He has to make new friends, learn a new language, my son is still an English learner... it gives him self-esteem to be willing to practice, to test things, and also be able to sometimes make a mistake and correct it and do it again. So I think that is a good learning experience. He is more receptive to lessons and he is willing to take a risk. (Parent 3)

Therefore, taken together, both quantitative and qualitative data provided converging evidence for the effectiveness of the framework, coupled with the coaching philosophies of the academy to facilitate positive values inculcation through football trainings.

Limitations

One limitation of the current study is the self-report nature of the level 4 measure of players' demonstration of values-based behaviours. It is recognised that self-report ratings are often inflated due to human's tendency of presenting oneself in a positive light (i.e., social desirability). Future research could explore using objective indicators for measuring players' demonstration of values-based behaviours. Another limitation was the small sample size and the lack of a control group in the study. These limitations restrict the generalizability of the results.

Conclusion

From the impact analysis study using a pre-post research design over a training term of approximately 10 weeks, results revealed that there were significant changes in coaches modelling framework principles and players' demonstrating responsibility based behaviours. Though quantitative data revealed a mixture of significant and non-significant results, this could be a function of the academy's existing values inculcation efforts prior to the use of the Game-for-Life framework as revealed by the high Time 1 scores and from the interviews with the coaches. Therefore, not all players might have felt a difference in terms of the coaches' application of values education during training and their own behaviours. A bigger sample size is required to improve the generalizability of the results.

Analysis of qualitative data from the interviews conducted however provided strong evidence of the understanding and demonstration of the framework principles and an increase in values-based behaviours of the players. Further analysis also revealed that the more frequent coaches facilitated values inculcation through the framework during football lessons, players perceived greater levels of enjoyment and actual football skill development. Hence, it is recommended that the academy continually uses the Game-for-Life toolkit to complement coaching methods in intentionally designing training sessions to optimise learning and opportunities for values inculcation, while taking into account the results of this impact analysis to identify the particular areas of application and values that can be more explicitly emphasised upon.

References

Kavussanu, M., & Boardley, I. D. (2009). The prosocial and antisocial behaviour in sport scale. *Journal of Sport & Exercise Psychology*, 31, 97-117.

Kirkpatrick, D. L. & Kirkpatrick, J. D. (2006). *Evaluating training programs: The four levels (3rd Edition)*. San Francisco, CA: Berrett-Koehler Publishers Inc.