

## Investigating the Relationship between the Perceptions of Taekwondo Athletes towards Coach-Athlete Relationship, Task and Ego Orientation in Sports, and Motivation in Sports

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### ABSTRACT

This research aims to determine the effect of tasks and egos of taekwondo athletes on the coach-athlete relationship and the effect of coach-athlete relationship on motivation in sports. Thus, "Coach-Athlete Relationship", "Task and Ego Orientation in Sports" and "Motivation in Sports" scales have been applied to the national team athletes attending the championship. The relational screening model which reveals the relationship between variables has been used in data analysis. Scaling and structural model have been established by SPSS-15 and LISREL programs. Additionally, it is concluded that perceptions about task and ego orientations of athletes explain %43 of perceptions belonging to coach-athlete relationship and %47 of perceptions belonging to motivation in sports. That the perceptions regarding task and ego orientations of athletes and coach-athlete relationship explain %77 of perceptions concerning the motivation in sports and that the athletes' perceptions regarding coach-athlete relationship explain %24 of perceptions concerning the motivation in sports.

### KEYWORDS

Motivation, task and ego, sport psychology, structural model, taekwondo

### ARTICLE HISTORY

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### Introduction

The concept of task, which is closely related to athletes' interests, satisfaction and enjoyment to sports, is defined as the one of goal structure of fair conducts in achieving the aim and achievement motivation by Duda and White (1992). When the goal orientation is taken into consideration, it is stated that ego related to individuals' proving themselves and their effort to have an edge over the others has an effect on motivation on the basis of achievement and result orientation. Anshel (1997), who tells athletes have different characteristics in terms of their task and ego participations, defines the athletes having higher intrinsic motivations are task attended and the athletes having higher

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extrinsic motivations are ego attended. In respect to this, goal orientation based upon cognitive elements can be classified as task oriented and ego oriented goals (Duda and Nicholls, 1992; Toros, 2005).

When the above-mentioned goal orientations are taken with respect to task and ego, it can be said that intrinsic and extrinsic factors having an effect on the motivations and performances of athletes have also effect on the goal orientations of the team (Vlachopoulos and Karageorghis, 2005).

Related to task and ego, in a study being done on athletes in order to determine task and ego orientations of athletes, the Task and Ego Orientation in Sport Questionnaire (TEOSQ) which is developed by Duda (1989) and adapted to Turkish by Toros (2001) has been used.

85 athletes interested in mountain climbing get involved in a study investigating the relationship between task and ego oriented goals and life satisfaction, and their goal orientations are examined by means of Task and Ego Orientation in Sport Questionnaire (TEOSQ) and their life satisfactions are examined by means of Life Satisfaction Questionnaire (LSQ). According to the study results, there is a significant relation between task oriented goals and life satisfaction while any significant relation is found between ego oriented goals and life satisfaction (Toros, Akyüz, Bayansalduz & Soyer, 2010).

On the other hand the effects of coaches on goal orientations can be associated with rewards and expectations on the basis of motivating athletes. Coach-athlete relationship plays an important role in providing this motivation. In this case, when different characteristics of coaches are taken into consideration, coach-athlete relationships differ from each other, and this affects goals and success on a large scale. If it is considered that athletes' ego and their efforts to prove themselves are connected, coaches' efficacies of realizing these efforts provide increasing respectability of the coaches (Tutko and Richards, 1971).

At the heart of a positive coach-athlete relationship, there are some components like confidence, respect, support, and communication. Positive relationships occurring as a result of these components make contribution to social, individual, and physical developments of the athletes (Dosil, 2000). In this case, coaches should lay too much emphasis on some treatments in order to achieve success in terms of fair conducts. According to Freischlag (1985), some of these treatments are praising athletes, making athletes feel precious, imbue these athletes with team awareness and criticizing them when it is necessary. Otherwise, positive environments which is not provided by coaches and not making athletes be accepted as an individual can cause failure, and it can affect the coach-athlete relationship negatively (Singer, 1972, pp. 356-367.).

Considering that coach-athlete relationship, study of Yücel which is carried out with male and female wrestlers draws attention. Yücel (2010), who examines the relationship between these athletes and their coaches according to some variables, asserts that there are no significant differences on this relationship on the basis of age, educational level, licenced years, and league, by concluding that Coach-Athlete Relationship Questionnaire (CART-Q) developed by Jowett and Ntoumanis (2004) is applicable and reliable while carrying out these studies in Turkey. In addition to this, differences are observed as part of gender and it is determined that female athletes are more compatible than male athletes from the stand point of their relationships with coaches.

Amorese and Horn (2000), examining coach-athlete relationship by taking intrinsic motivations of athletes into consideration, shows the relationship between scholarship students and their understanding of coaches' behaviors by studying with 386 male and female university students. According to this study which examines relationship between the comprehension of athletes about intrinsic motivations, genders, scholarship status, number of scholarship team-mate and the comprehension of coaches' behaviors by using multivariate analyses and which argues the results according to cognitive evaluation theory; scholarship students have higher level of intrinsic motivation than non-scholarship students. Besides, as compared with female athletes, male athletes have higher intrinsic motivation, and perceived coach behaviors are related to the intrinsic motivations of athletes. Especially the athletes who have high intrinsic motivation consider that their coaches display leadership emphasizing education and enlightenment and more democratic behaviors. Furthermore, it is indicated that while the coaches of the athletes having high intrinsic motivation give considerably positive and informational feedbacks, they perceive the coaches are less punishment oriented and less ignored behaviors.

In a study done with athletes and coaches before and after Turkey championship by Toros (2011), he has presented some findings with respect to the effects of coaches on the team, and in this context he has concluded that democratic and rewarding behaviors, social supports and positive feedbacks increase efficacy sense of athlete.

In addition to these perceptions based on cognitive foundations; as a lexical meaning, motivation is defined as stimulation or resultant of stimulations that make individuals turn into conscious and intentional works by TDK. It is taken up as a first cause that initiates human behaviors within the frame of this concept in terms of reaching the goals and success. Motivation that is classified as intrinsic and extrinsic has an importance for athletes on the basis of attendance and maintenance. While reasons like will to success and pleasure are defined as intrinsic motivation, reasons such as gaining status and praise are taken as extrinsic motivation (Deci and Ryan, 2000; Morali, Doğan, Kazak & Engür, 2004).

The Sport Motivation Scale (SMS), which is mostly used in the studies done on motivation in sports activities, is composed of seven sub-scales, and it is aimed to measure being not motivated as well as intrinsic and extrinsic motivation stated above. In a study done by Pelletier, Fortier, Vallerand, Tuson, Brikre, and Blais (1995), they have used motivational premises (like "I see myself as a good athlete") including efficacies perceived by 593 university athletes, 319 of whom are male and 274 are female in the average age of 19.2. As a conclusion, it is found that there is a positive relationship between the results of different kinds of sport premises and motivational results while they have negative relationship with the sub-scale of being unmotivated.

## METHODOLOGY

### Research Model

The aim of this research is to determine the effect of task and egos of the Taekwondo athletes attending Turkey championship on the coach-athlete relationship and the effect of the coach-athlete relationship on motivation in sports. In accordance with this purpose, Coach-Athlete Relationship Questionnaire (CART-Q), Task and Ego Orientation in Sport

Questionnaire (TEOSQ) and Sport Motivation Scale (SMS) are conducted to these athletes, and it is aimed to determine these relations by looking at the athletes' perceptions. In line with this target, relational research model revealing the relationship between variables have been used. Relational research model opens the way for explaining the relationships between variables and for estimating the results (Tekbiyık, 2014).

This study has been carried on 231 national team athletes and 175 athletes not from national team and totally 406 athletes attending Turkey championship. In order to examine the data obtaining from these athletes within the scope of this research, the structural model has been set for identifying the relationships between scales and scaling model by utilizing SPSS-15 and LISREL programs.

Sample graphic display belonging to scaling model and structural model are seen in Figure-1:

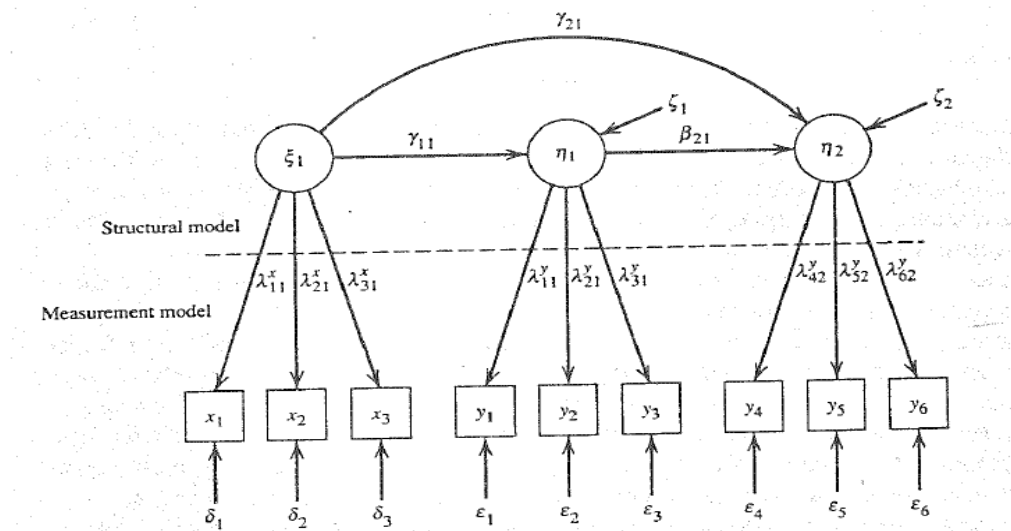


Figure 1. Structural equation modeling sample, adapted from "Applied multivariate techniques" by S. Sharma, 1996, p.427

Structural Equation Model is an extensive statistic approach that is used to test the models in which causal and correlation relations between observable and unobservable variables exist together (Hoyle, 1995, pp.158-177).

Scaling model states how the implicit variables and theoretical structures depend on observed variables and how they are indicated (Dursun & Kocagöz, 2010).

When the multivariate normality assumptions related to the data given in the DFA analysis belonging to scales and structural model are tested, it is concluded that they are higher than the critical value (that is 1,00) and the deviancy and flatness values are significant. As it is higher than 1,00 critical value and because it does not provide multivariate normality assumption according to Jöreskog (2002), Robust Maximum Likelihood (RML) estimation method has been used instead of Maximum Likelihood (ML).

Within the scope of this research, information related to the validity and reliability of the scales conducted to national team athletes and athletes not from national team attending Turkey championship is stated below:

#### Task and Ego Orientation in Sport Questionnaire (TEOSQ)

As having two factors and 13 items, a scale developed by Duda (1989) and adapted to Turkish by Toros (2001) has been used. The first factor of the scale including seven items constitutes task orientation and their factor load values change between 0,63 and 0,83. The second factor of the scale consisting of 6 items constitutes ego orientation and their factor load values change 0,64 and 0,84. It is seen that Cronbach Alpha value related to task orientation factor is 0,87, Cronbach Alpha value related to ego orientation factor is 0,85, and Cronbach Alpha value belonging to overall scale is 0,86.

#### Coach-Athlete Relationship Questionnaire (CART-Q)

The Coach-Athlete Relationship Questionnaire (CART-Q) developed by Jowett and Ntoumanis (2004) is adapted to Turkish by Altıntaş, Çetinkalp and Aşçı (2012). It is seen that this scale includes 11 items and three sub-factors and this structure is confirmed. The sub-factors of this seven-likert scale are proximity (four items), dependence (three items), and complementariness (4 items). When the conformity index values of the confirmatory factor analysis carried out separately are examined, it is seen that DFA models are confirmed.

#### Sport Motivation Scale (SMS)

The validity and reliability of the Sport Motivation Scale developed by Pelletier, Fortier, Valierand, Tuson, Biere and Blais (1995) have been tested by Kazak (2014) for Turkish Athletes. The sport motivation scale is composed of 28 items in which judgments are made according to seven-evaluation step and it includes seven sub-scales. While the original scale consists of seven sub-scales, the scale items are subsumed under six sub-scales after the principal components factor analysis, and it explains %60 of total variance. When we look at their reliabilities, they change between 0,72 and 0,88.

## FINDINGS

Findings related to the sub-purposes tested in accordance with the purpose of the research, are stated below:

#### Finding related to the scaling models:

##### Coach-Athlete Relationship Questionnaire (CART-Q)

At this stage, before the structural model is set, conformity index values related to first-level and three-factor model have been investigated by examining the results of DFA analysis belonging to the Coach-Athlete Relationship Questionnaire (CART-Q). According to Relative Multivariate Kurtosis = 2.856 > 1.00, it is seen that it does not provide multivariate normality assumption.

When the results are examined according to three-factor DFA model that has been set for the coach-athlete relationship, it is found that  $SB-\chi^2/(df)=71.78/(41)=1.75$ ,  $RMSEA=0.043$ ,  $SRMR=0.043$ ,  $GFI=0.92$ ,  $AGFI=0.87$ ,  $CFI=1.00$ ,  $NNFI=0.99$ . It is seen

that first-level three-factor confirmatory factor analysis model has an admissible conformity. The scaling model belonging to this scale is demonstrated in Figure-2.

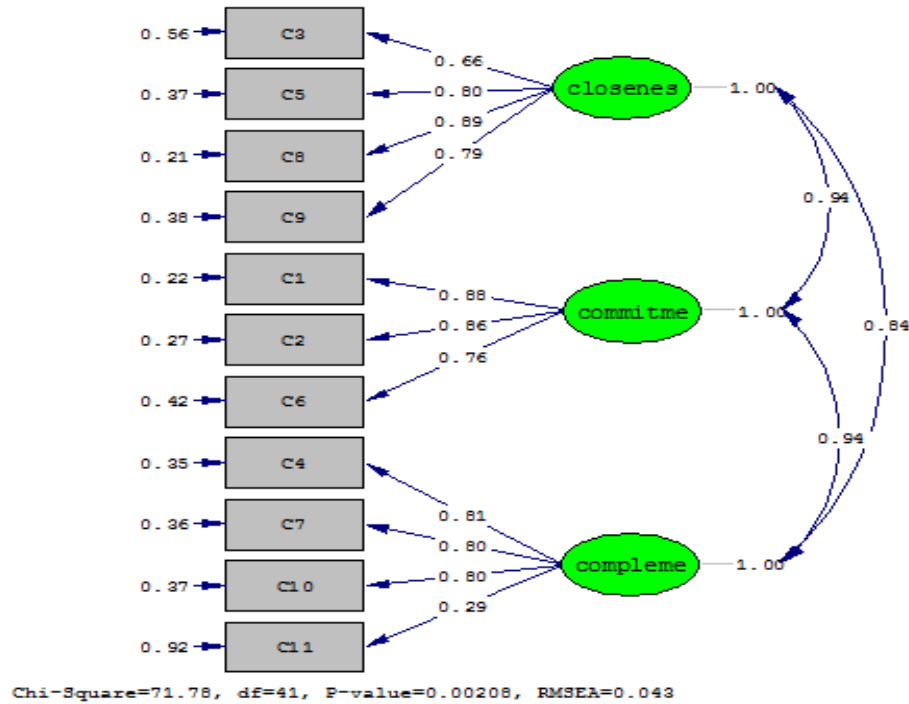


Figure 2. First-Level Three-Factor DFA Model

#### Task and Ego Orientation in Sport Questionnaire (TEOSQ)

At this stage, before the structural model is set, conformity index values related to first-level and two-factor model have been investigated by examining the results of DFA analysis belonging to the Task and Ego Orientation in Sport Questionnaire (TEOSQ).

According to Relative Multivariate Kurtosis = 1.347 > 1.00, it is seen that it does not provide multivariate normality assumption.

When the results are examined according to two-factor DFA model that has been set for the task and ego orientation in sport, it is found that  $SB-\chi^2/(df)=261.63/(64)=4.09$ , RMSEA=0.087, SRMR=0.066, GFI=0.87, AGFI=0.82, CFI=0.96, NNFI=0.96. It is seen that first-level two-factor confirmatory factor analysis model has an admissible conformity. The scaling model belonging to this scale is demonstrated in Figure-3.

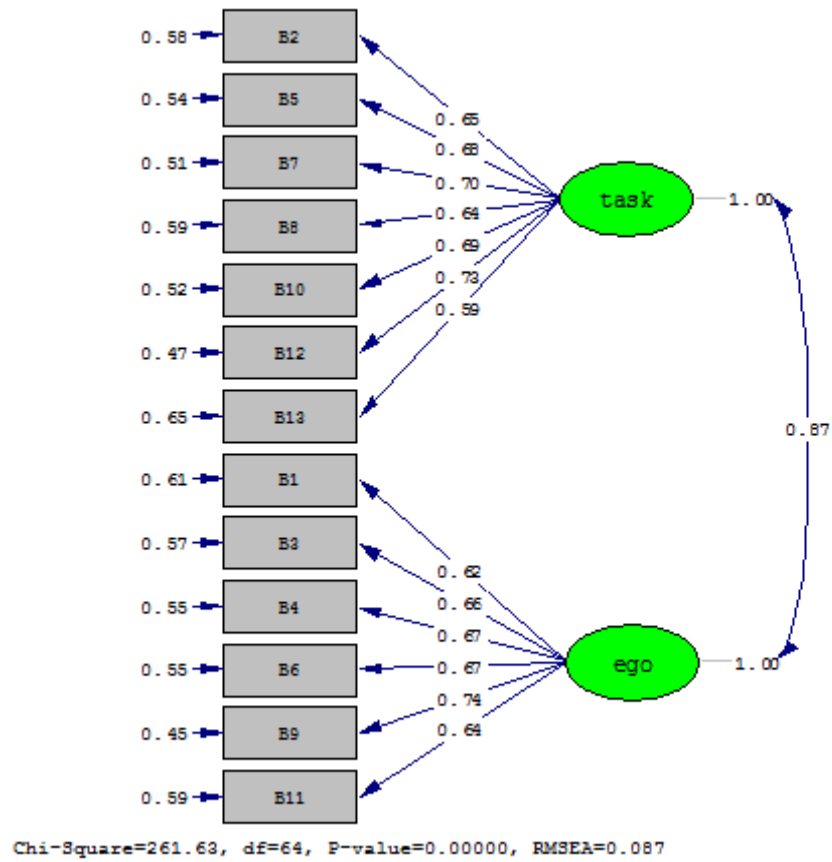


Figure 3. First-Level Two-Factor DFA Model

#### Sport Motivation Scale (SMS)

At this stage, before the structural model is set, conformity index values related to first-level and six-factor model have been investigated by examining the results of DFA analysis belonging to the Sport Motivation Scale (SMS). According to Relative Multivariate Kurtosis = 1.192 > 1.00, it is seen that it does not provide multivariate normality assumption.

When the results are examined according to six-factor DFA model that has been set for the motivation in sport, it is found that  $SB-\chi^2/(df)=1118.70/(294)=3.81$ , RMSEA=0.092, SRMR=0.072, GFI=0.87, AGFI=0.85, CFI=0.95, NNFI=0.92. It is seen that first-level six-factor confirmatory factor analysis model has an admissible conformity. The scaling model belonging to this scale is demonstrated in Figure-4.

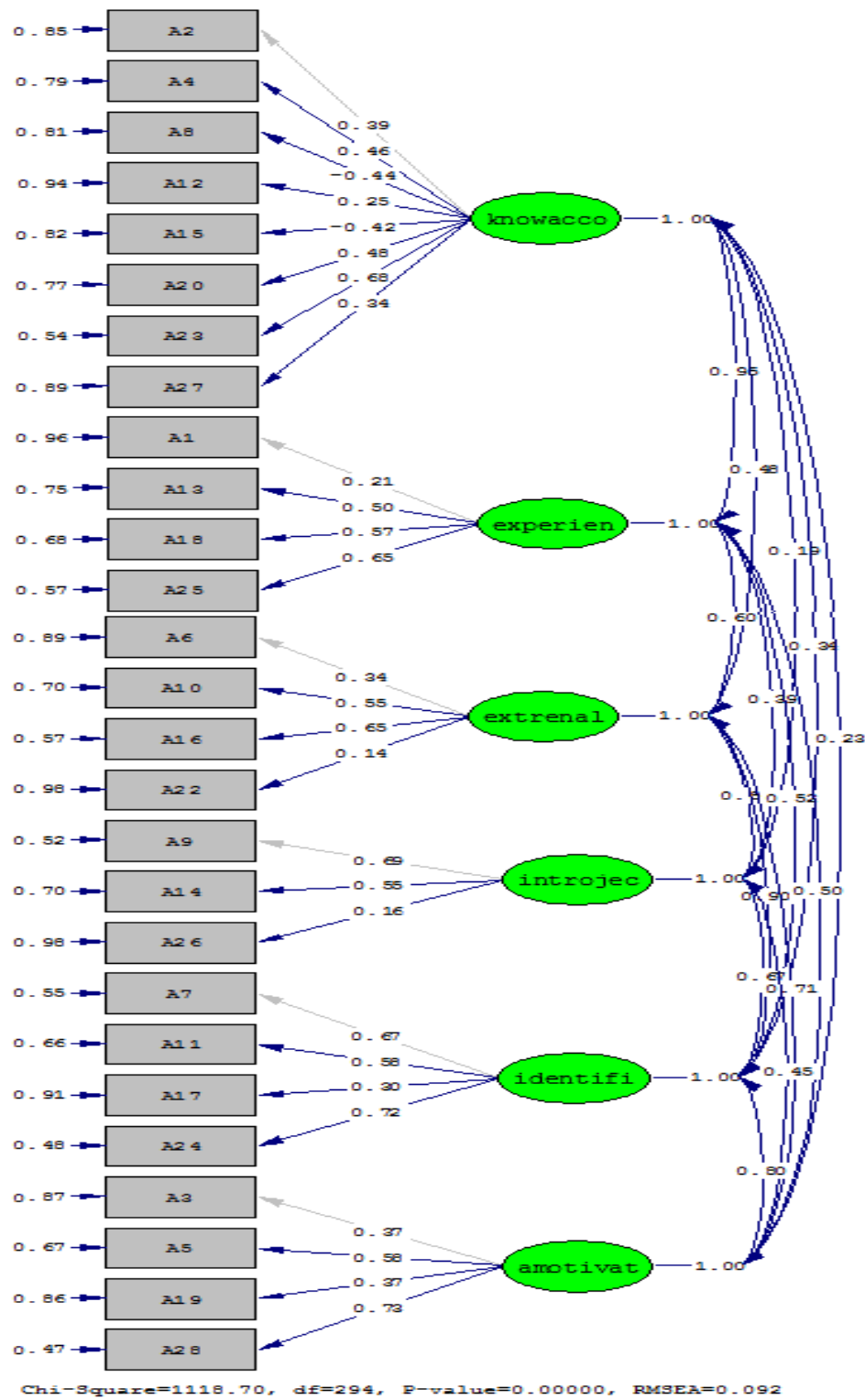


Figure 4. First-Level Six-Factor DFA Model

Findings related to the Structural Model:



At this stage, the conformity index values have been examined by looking at the results belonging to the structural equation model set between perception levels related to the Coach-Athlete Relationship Questionnaire (CART-Q), Task and Ego Orientation in Sport Questionnaire (TEOSQ), and Sport Motivation Scale (SMS). Relative Multivariate Kurtosis = 1.130>1.00, it is seen that it does not provide multivariate normality assumption. .

According to the purpose of the study, when the conformity index values related to the structural model set for revealing the determined relationship are examined, it is found that  $\chi^2 / (df)=269.08/(41)=6.56$ , RMSEA=0.154, SRMR=0.072 GFI=0.90, AGFI=0.85, CFI=0.95, NNFI=0.94. When the conformity index values are examined, it is seen that this structural model has admissible conformity index. The presentation of the structural model belonging to the relationship between scales is seen in Figure-5.

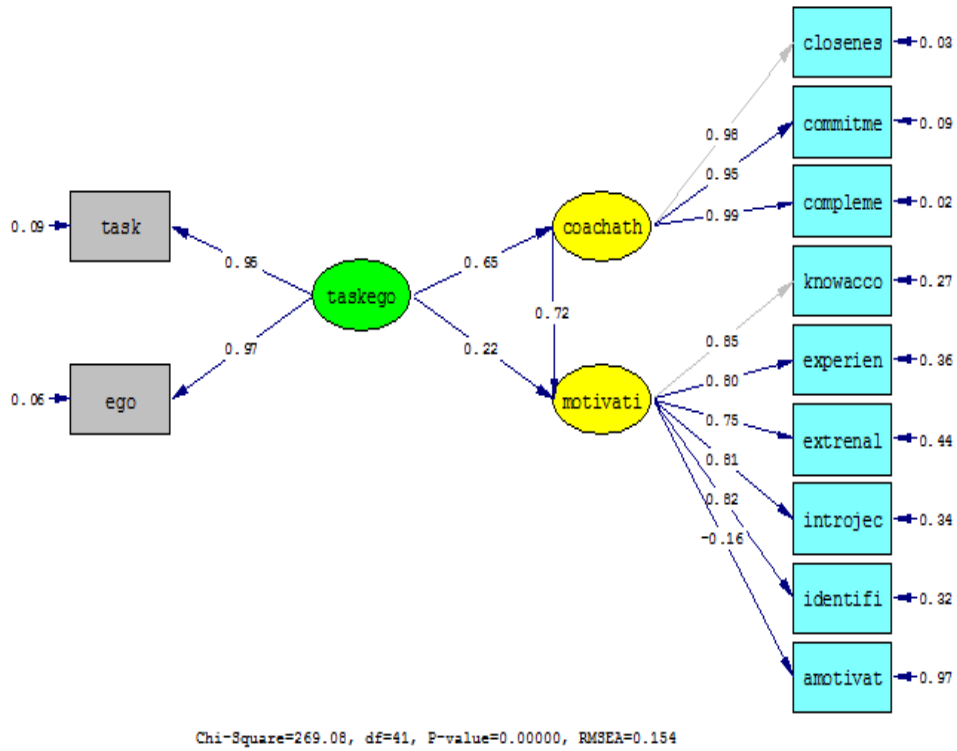


Figure 5. The Structural Model belonging to the Scales

When the relationship between the variables belonging to the structural model is examined, the effect of the perception levels related to the task and ego orientation scale applied to the athletes on the perception levels related to the coach-athlete relationship scale is  $R^2=0.43$ .

The effect of the perception levels related to the task and ego orientation scale applied to the athletes on the perception levels related to the sports motivation scale is  $R^2=0.47$ .

When the perception levels related to the task and ego orientation scale applied to the athletes and the perception levels related to the coach-athlete relationship scale are taken up together, its effect on the perception levels of sport motivation scale is  $R^2=0.77$ .

The effect of the perception level of coach-athlete relationship scale applied to the athletes on the perception levels of sport motivation scale is  $R^2=0.77-0.43=0.24$ .

## DISCUSSION AND CONCLUSION

When the conformity index values belonging to the single factor DFA models set before the structural model are examined and CFI-NNFI values are considered, it is seen that they have an excellent conformity. When the  $\chi^2/ (df)$  value is examined, it is concluded that they have a good conformity, too.

When the RMSEA values are examined, it is concluded that it has admissible conformity level. But in a situation that it does not have admissible conformity, SRMR value has been examined and it is concluded that the result of this value is admissible. According to the CFI and GFI values, it can be said that it provides the multivariate normality because there is not much difference between them. In general, it is concluded that there is an admissible conformity between factors and items in the single factor DFA model set with the scales, and the scaling models belonging to the scales are defined.

When the conformity index values related to the structural model are examined, it is concluded that the established model set by three scales applied to the athletes is confirmed. When the results of the relationship between scales are examined, it is concluded that;

Perceptions of athletes about the task and ego orientation explain %43 of their perceptions of coach-athlete relationship,

Perceptions of athletes about the task and ego orientation explain %47 of their perceptions of motivation in sports,

Perceptions of athletes about the task and ego orientation and their perceptions of coach-athlete relationship explain %77 of their perceptions of motivation in sports,

Perceptions of athletes about coach-athlete relationship explain %24 of their perceptions of motivation in sports.

It is concluded that the most effect on the perceptions of Taekwondo athletes attending Turkey championship about their motivations in sports is on their perceptions of task and ego orientations. Perceptions of athletes about task and ego orientation explain their perceptions about motivation two times more when it is compared to their perceptions about the coach-athlete relationship. It is concluded that task and ego orientation has more effect on the motivation in sports. When we look at the literature,

task and ego takes part as sub-scales of the motivation, and as a result it has the most explanation variance. In Koenig and Butki's study on footballers, they state that there is a positive relationship between ego oriented scores and extrinsic motivation scores and there is also a positive relationship between task oriented scores and intrinsic motivation scores (2000). In a study on goal orientation, sport efficacy, and life satisfaction, Kazak, Morali and Doğan (2004) investigate the motivational orientations on 218 athletes from the ages of 17-27, and they conclude that task orientation has positive effect on intrinsic motivation while ego orientation has positive effect on extrinsic motivation. Murcia, Gimeno, and Coll (2008) assert that the relationship between the perceptions of the motivational environments including task and ego and the general moods is significant and positive.

## SUGGESTIONS

It is considered that activities increasing task and ego orientations of the Taekwondo athletes affect their perceptions about motivation in sports directly. Responsibilities that can increase their levels of motivation towards sport are suggested.

It is conceived that studies providing to determine what are the factors that affect relationship between Taekwondo athletes and their coaches positively are necessary. To give seminar and conference related to how the athletes have positive sport psychology at universities can be useful.

For the previous studies, it is suggested that different structural models should be established by measuring the variables like stress, anxiety, and life satisfaction that can be affect the motivation levels of athletes.

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