

Achievement Goals' relation with Social Value Orientations and their Stability across Time and Different Contexts

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Abstract

In achievement goal literature, most attention was given to the intrapersonal effects of achievement goals. Even though it is recognized that achievement motivation takes place in a broader social context, so far little attention has been paid to the interpersonal effects of achievement goals. Secondly, a diverse view exists on the degree of stability among achievement goals. In this study both themes were addressed. First, the relation between achievement goals and social value orientations was examined, among 230 individuals who play team sports. Secondly, the stability of dominant achievement goals, over time and different contexts, was studied among the same group of individuals. The results demonstrate that there is no relation between achievement goals are more stable than performance goals across different contexts, meaning performance goals are more prone to contextual changes. *Keywords: Achievement Goals, Social Value Orientations, Stability*

Introduction

"A champion needs a motivation above and beyond winning"

Pat Riley, basketball coach – (<u>http://www.people.ubr.com</u>)

Some individuals want to win, or beat other people at all costs. In contrast, other people want to develop new skills, or improve their competence. In achievement goal theory, the first goal is called a *performance goal*, and the latter a *mastery goal*. In motivational research, achievement goal theory is a pre-eminent approach to explain behaviour in achievement situations, like for instance at school, or at work, but especially in sports. These are interdependent situations, indeed people depend on each other in various ways to accomplish their goals (Mayer, Davis, & Schoorman, 1995). More specifically, individuals need social exchange relationships to realize their goals (Poortvliet, Janssen, Van Yperen & Van Vliert, 2006). For instance, in a sports team individuals need their team mates' qualities to achieve a goal. Even though it's recognized that achievement motivation takes place in a broader social context (cf. Janssen & Van Yperen, 2004; lePine, 2005; VandeWalle, 2003; Darnon, Muller, Schrager, Pannuzzo, & Butera, in press; Elliot & Reis, 2003), so far little attention has been paid in research to achievement goals in interdependent situations. Researchers, up till now, have mainly focused on the *intrapersonal* effects of achievement goals, instead of examining the interpersonal effects of them.

A motivation theory that particularly focuses on interdependent situations is Social Motives Theory (Messick & McClintock, 1968), also called Social Value Theory (Knight & Dubro, 1984; Kuhlman & Marshello, 1975; McClintock & Liebrand, 1988). Social values connote preferences that individuals have for the distribution of outcomes between themselves and the interdependent other (McClintock, 1977). It refers to the value people attach to their own outcomes, and at the same time the value they attach to others' outcomes. There are an infinite number of social value orientations, ranging from aggression (i.e. reflecting an orientation for minimizing the other party's outcomes), to altruism (i.e. maximizing the other party's outcome).

The question is how achievement goals and social value orientations relate to each other in interdependent situations, particularly in sports. Some parallels can be found. For example, individuals with a performance goal, as well as individuals with a *competitive* social value orientation focus on beating the other person. On the other hand, both a mastery goal and a prosocial value orientation are related to cooperative behaviours. In this study, the focus is on this relation among individuals who work in teams, especially those who play a team sport. Therefore the first part of the research question reads:

What is the relationship between achievement goals and social value orientations of students who play team sports?

Furthermore, in literature on achievement motivation, different views are presented on the stability of achievement goals. Research by Duda and Nicholls (1992), for instance, indicates that achievement goals are relatively stable in different achievement situations. More recently, Van Yperen (2006) demonstrated that a high percentage of individuals (about 85%) have a clear preference for a particular achievement goal, which is called a *dominant achievement goal*. However, he also suggests that (dominant) achievement goals could vary over time and in different contexts. In the present study, therefore, the stability of dominant achievement goals is examined. The second part of the central research question reads:

How stable are achievement goals across time and in different contexts for students who play team sports?

First an elaboration is presented on achievement goals and their relation with social value orientations. Additionally, the possible association with trust is discussed, because this is a regularly measured variable in studies on interdependent situations. In the second part we elaborate on the stability of achievement goals across time and different contexts. Related to this theme, we discuss the role of self-efficacy; one of the core-constructs for predicting individuals' performance outcomes on achievement goals.

Achievement goals

Achievement goals reflect the purpose or reason for an individuals' achievement pursuits in a particular situation (Poortvliet e.a., 2006, p. 4). Achievement goal literature mainly focuses on two categories of goals. These goals can also be a reflection of the measure, or standard along which an individual judges his own performance (Pintrich & Schunk, 1996). In the past, these two categories have been labelled differently, namely *ego vs. taskorientation* (Duda & Newton, 1993; Nicholls, 1984), *learning vs. performance orientation* (Elliot & Dweck, 1988), and *mastery vs. performance orientation* (Ames & Archer, 1988).

Individuals with a *mastery* goal focus on mastering a task or activity according to self-set standards. This means they decide which level of mastery they regard as successful, based on absolute criteria. They predominantly compare their present- with previous performances (Van Yperen, 2003) as evidence of their own progress. The focus that these individuals, namely, have is on the development of new skills and improvement of competence (Dweck & Elliot, 1983). They try to achieve something challenging, and by doing so gain knowledge, or insight (Pintrich & Schunk, 1996). Furthermore, these individuals show an intrinsic interest in learning, and feel pride and satisfaction in success that required effort. Failure however is attributed to a personal lack of effort and they feel guilty about it.

Individuals with a performance goal, on the other hand, focus on relative ability and how their ability is judged by others. They try to demonstrate their superior competence by attempting to out best others' performance (Dweck & Elliot, 1983), or surpassing normative performance standards (Pintrich & Schunk 1996). Accordingly, the criteria they use to evaluate their achievements are norms and social comparison with others. When they fail to achieve a goal, this is attributed to a lack of their own ability.

Social Value Orientation

As mentioned before, there are an infinite number of social value orientations. However, the three most prominent social value orientations in Social Value Theory (Knight & Dubro, 1984; Kuhlman & Marshello, 1975; McClintock & Liebrand, 1988; uit Platow & Shave, 1995) are: *prosocial, individualistic* and *competitiveness*. This typology has been the foundation for numerous studies, that were conducted to explain why individuals differ in their approach, judgement and reactions regarding others in interdependent situations (e.g., Kelley & Stahelski, 1970; Kuhlman & Marshello, 1975; Liebrand, Jansen, Rijken, & Suhre, 1986; McClintock & Liebrand, 1988; Sattler & Kerr, 1991; Van Lange & Kuhlman, 1994).

'*Prosocials*' value an equal distribution of outcomes between themselves and others. They focus on reciprocal and cooperative behaviour when working together with others. '*Individualists*' tend to focus solely on enhancing or maximising their own outcomes without regarding the outcomes, or situation of others. Finally, '*competitives*' attach most value to maximising the difference between their own outcomes and those of others. Also, they focus on beating others, or winning. The latter two social value orientations are obviously focused on exploiting an interdependent situation in their own interest, and maximizing own profits. Even more, research demonstrates that they tend to show exploitative and non-cooperative behaviour (De Cremer & Van Lange, 2001; Van Lange, 1999; Van Lange, Agnew, Harinck & Steemers, 1997). Because of this similar focus, and the related behaviours they are regularly combined and referred to as '*proself*' in studies on social value orientations, which is also the case in the present study.

In the context of experimental games, prosocials' behaviours tend to be more strongly guided by considerations of reciprocity where as proselfs' behaviours are more guided by a focus on exploitation in the interdependent situation (McClintock & Liebrand, 1988; Sattler & Kerr, 1991; Van Lange & Kuhlman, 1994).

Relation between achievement goals and social value orientations

As was mentioned earlier, individuals need social exchange relationships to realize their achievement goals (Janssen & Van Yperen, 2004), which arguably makes the achievement of a goal an interdependent situation. Consequently, the accomplishment of a goal is often accompanied by exchange (i.e. distribution) of means like, for instance, information. As was mentioned, the preference that individuals show for a distribution of means, reveals their social value orientation. Arguably, there is a connection between achievement goals and social value orientations in the interdependent situation. Namely *mastery goals* and *prosocial value orientations* appear to be strongly connected, indeed they are both associated with cooperative behaviour and with a search for reciprocity (Poortvliet e.a., 2007; Van Lange, 1999; Van Lange et al., 1997; De Dreu & Van Lange, 1995). In contrast *performance goals* seem to be connected with a *proself value orientation*, namely both are associated with more exploitative and self-centred behaviours in interdependent settings (Van Lange, 1999; Van Lange et al., 1997).

Several researchers found that individuals with a mastery goal are actively searching for interaction with others (Jansen & Van Yperen, 2004; Levy, Kaplan & Patrick, 2004; Darnon et al., 2006). Poortvliet et al., (2007) found that these individuals tend to give high-quality

information to their exchange partners and also adopt a reciprocal orientation towards others, when it comes to the exchange of information. The same researchers reason that individuals with a mastery goal see their exchange partners as "allies" with whom they can share information, knowledge and experiences, to enhance their own competence. By sharing valuable information with others, they expect others to later repay that benefit, or adhere to the reciprocity norm. This norm indicates that people should help rather than injure those that have helped them (Gouldner, 1960). This, arguably, means that individuals with a mastery goal have an interest in, or concern for the outcomes of others, besides their own, or in other words they appear to be prosocial. In contrast, if they keep valuable information for themselves, and don't share it (i.e. proself value orientation) than other people will not return the favour. With that behaviour they risk the possibility of not achieving their goal of mastering skills.

Individuals with performance goals have 'lower' quality exchange relationships with others, than individuals with a mastery goal (Jansen & Van Yperen, 2004). Consequently, they tend to avoid help-seeking behaviour (Karabenick, 2003; Ryan & Pintrich, 1997), and often see others as a threat (Ryan & Pintrich, 1997). Along with that, they show a number of non-cooperative behaviours towards others. Research of Midgley, Kaplan and Middleton (2001) demonstrated that individuals with a performance goal show less willingness to cooperate with other students in school. As mentioned before, individuals with a performance goal want to establish their superiority over others and think that success is about beating others (Harrackiewicz, Carter, Lehto, Baron & Elliot, 1997; Duda & Nicholls, 1992). It is suggested by Poortvliet et al., (2007) that they develop an exploitative orientation when it concerns exchange of information (Poortvliet et al., 2007). The same researchers reason that individuals with a performance goal see their exchange partners as their "rivals" with whom sharing valuable information (i.e. prosocial value orientation) is counterproductive to attaining superiority. In other words, with the focus on showing superiority, they show a preference for maximizing their own outcomes. Consequently, they might disregard the outcomes of others or even intentionally aim to minimize it. This points to a proself value orientation. The reasoning above leads to the following hypothesis:

Hypothese 1.

There is a relationship between achievement goals and social value orientations; individuals who have a mastery goal are more often prosocial, and individuals with a performance goal are more often proself.

Trust

An extensive amount of research has been done on the role of 'trust' in interdependent situations (De Dreu et al., 1998; Lewicki, McAllister & Bies, 1998; Kimmel, Pruitt, Magenau Konar-Goldband & Carnevale, 1980). Trust can be defined as a psychological state comprising the intention to accept vulnerability based upon positive expectations of the intentions or behaviour of the other person (Rousseau, Sitkin, Burt & Camerer, 1998). Most studies confirm the common understanding that prosocials report higher levels of trust than proselfs do (De Dreu et al., 1998; Weingart, Bennet & Brett; 1993). Following the reasoning on the relation between achievement goals and social value orientation (see the previous section), the question arises what the relation is between achievement goals and trust.

As noted before, individuals with a mastery goal focus on enhancing their competence. As a means to achieve their goal they adopt a reciprocity orientation towards the exchange of information (Poortvliet et al., 2007). According to the reciprocity norm, they expect others to return the favour. Arguably, this expectation, and the consequent sharing of valuable information, is accompanied by a certain amount of trust in that person. Surely, people might be more hesitant to share information if they expect that others don't intend to return the favour, or will misuse the information. In addition, Poortvliet et al., (2007) found that individuals with a mastery goal give information of higher quality (i.e. more value) to their exchange partners than individuals with a performance goal. The same researchers reasoned that this is the case, because individuals with mastery goals have more positive expectations of the intentions of others than individuals with performance goals have.

Because individuals with a performance goal want to beat others, they see others as their 'rivals' with whom it is not wise to share knowledge, or experience. This might give the other party the possibility to use the information to take advantage of them. In addition, individuals with a performance goal adopt an exploitative orientation when it comes to sharing information, and consequently they give information of lower quality than individuals with a mastery goal do (Poortvliet et al., 2007). This suspicious attitude, and the related behaviours, seem to be grounded in the degree of 'trust' in others. This leads to the following expectation:

Hypothesis 2.

Individuals with a mastery goal report more interpersonal trust than individuals with a performance goal do.

Stability of achievement goals

Van Yperen (2006) demonstrated that most individuals have a clear preference for a particular achievement goal, called a *dominant achievement goal*. However he also suggested that it would be interesting to study whether dominant achievement goals would be stable across different contexts. In the debate on stability of achievement motivation, some researchers, like Weiner (1990), suggested that there is little stability across different contexts. Even more, Ames (1988) demonstrated that achievement goals are affected by environmental influences, and Church, Elliot & Gable (2001) showed that classroom environment, like perceived evaluation, can influence goal adoption. The latter researchers claimed that perceived harsh evaluation can lead to the adoption of performance goals and inhibit the adoption of mastery goals. On the other hand there are researchers, who claimed that achievement goals are fairly *stable dispositions*. For instance, Duda & Nicholls (1992) found that achievement goals are similar across achievement situations, like sport and academic work. In the present study the difference in '*stability*' between individuals with *mastery* - and *performance goals* is examined across a 'competitive-' and a relatively 'neutral' context.

Individuals with a mastery goal set goals that have a personal meaning, and measure their success by self-set standards. In other words, they have an 'inner drive' for achieving particular goals. This focus seems to signify a certain independence of influences from outside the person. Accordingly, these individuals tend to demonstrate intrinsically motivated behaviour to achieve their goals (Van Yperen, 2006; Rawsthorne & Elliot, 1999; Heyman & Dweck, 1992). Intrinsic motivation is defined, by Deci & Ryan (1985), as behaviour for which the rewards are internal to the person. Consequently, variation in context will have little, or no influence at all on the goals these individuals have, or on the activities they are willing to undertake to achieve it.

Individuals with a performance goal, on the other hand, measure their success by comparing their performance with that of others. Their prime drive is to show their superiority, or outperform others (Pintrich & Schunk, 1997), which is their normative standard. Accordingly, these individuals are often extrinsically motivated (Van Yperen, 2006). This is behaviour, meant to attain contingent outcomes outside the activity (Deci, 1971). For instance an athlete who plays basketball to be popular at school, i.e. get praise from peers, is extrinsically motivated. In a 'competitive context' the normative standard, and extrinsic rewards are overtly present (e.g. the score in a sports game, reactions from opponents, or from spectators). However, in a 'neutral context' normative standards or

extrinsic rewards are not so overtly present. Consequently, their drive to show their superiority, or expectation of extrinsic rewards are triggered to a lesser extent, or maybe not even present. When this is the case, arguably they might start searching for goals that have a personal meaning (i.e. a turn to intrinsic behaviours) sounds reasonable. This can shift their preference of achievement goal. The above reasoning results in the following hypothesis:

Hypothesis 3:

Individuals with a mastery goal demonstrate more stability across time and different contexts than individuals with a performance goal do.

Self-efficacy

In research on achievement goals (VandeWalle, Cron & Slocum, 2001) self-efficacy has been used as one of the three core-constructs for predicting individuals' performance outcomes. It refers to the belief that a person has the capacity to organize, and execute the course of action required to produce a desired outcome (Bandura, 1997). In studies on achievement motivation, mastery goals are connected to higher levels of self-efficacy and performance goals to lower levels of self-efficacy (VandeWalle et al., 2001; Philips & Gully, 1997). In this study the expectation is that these findings will be replicated.

In the previous section we suggested that mastery goals are more stable than performance goals. Does this also imply that self-efficacy is more stable across different contexts? Bong and Clark (1999) found that self-efficacy was moderately stable across different contexts, depending on the similarity between tasks that an individual wants to accomplish in a particular context. In this study we examined, if there is a difference in stability of self-efficacy between mastery- and performance goals.

As mentioned in the previous section, individuals with a mastery goal set goals with a personal meaning, and use self-set standards to measure their success. This self-referenced way of setting goals and measuring success seems to imply two different things. Firstly, it implies a belief in one's own capacity to organize and execute the course of action required to produce a desired outcome (read; self-efficacy). Secondly, it seems to signify a marginal influence of variation in context. On the other hand, individuals with a performance goal use normative standards to measure their success and they attribute failure to a lack of ability. In a competitive context, they will experience higher self-efficacy when they expect to encounter an opponent that is predicted to be 'weaker' than they are, and vice versa. In a neutral context,

as mentioned before, the expectation is that individuals might shift their goal-preference. Consequently this can also change their perceived self-efficacy. Reasonably this means that, among individuals with a performance goal, there will be more fluctuation in self-efficacy (i.e. less stability) across contexts, than among individuals with a mastery goal. This reasoning above leads to two different hypotheses:

Hypothesis 4:

- a. Individuals with a mastery goal report more self-efficacy than individuals with a performance goal.
- b. Self-efficacy is more stable for individuals with a mastery goal than for individuals with a performance goal.

Method

Participants and procedure. A convenience sample of 230 Dutch individuals (154 men and 76 women) was approached to fill in questionnaires, at two different moments in time (T1 and T2). On both occasions two versions were randomly handed out (with a different ordering of measures) of the same questionnaire, to prevent bias. All respondents were students, who play a team sport such as basketball, soccer, volleyball, (uni-) hockey, waterpolo, baseball, korfbal, or handbal.

At T1 the total sample ($M_{age} = 22.6$ years, $SD_{age} = 3.2$) was asked to fill in a written questionnaire immediately following their (sport-) training session. The sessions all ended with a competitive match between two teams to put the individuals in a competitive 'mode'. At T2, which was two months later¹, the complete sample was approached again to fill in a questionnaire. This time an online questionnaire was used. The questionnaire was preceded by a couple of introductory questions on daily activities, to put respondents in a 'neutral' mode. There were 126 individuals (79 men and 47 women) who responded, resulting in a response rate of 53.9%. The mean age was 22.6 years ($SD_{age} = 3.2$). With respect to gender and age, both groups of respondents on T1 and T2 were comparable.

Measures on Testmoment 1 (T1)

In the present study a new and sophisticated instrument was used to assess an individuals' preference for a particular achievement goal (i.e. *dominant* achievement goal). The instrument, which was recently developed by Van Yperen (2006), and which is included in table 3, was based on Elliot and McGregor's (2001) 2×2 framework. This framework adds the dimension of valence (*approach vs. avoidance*), to the defined goals: *mastery and performance*. Approach-goals are directed towards positive or desirable events, whereas avoidance goals are aimed at avoiding negative or undesirable events (cf., Higgins, 1997; from Van Yperen, 2006).

Achievement Goals. In the mentioned instrument, a six-item "Round robin" forced choice measure was used. Each of the achievement goals were contrasted pair wise with the other 3 possible achievement goals. If a particular goal was *consistently* chosen 3 times, then individuals were considered to have that dominant achievement goal. If not, an individual was considered to have '*no dominant goal*'. Of the 230 respondents, 98 had a mastery-approach

¹ This time-interval was chosen to prevent 'practice effects'

goal (42.6%) and 24 had a mastery-avoidance goal (10.4%). There were 29 with a performance-approach goal (12.6%) and 19 with a performance-avoidance goal (8.3%). There were 60 individuals (26.1%) who reported to have '*no goal*'. The observed percentages of individuals' dominant achievement goals deviated from an equal division across the four goals, χ^2 (3, N=170) = 97.8, p < .01.² For results, see table 7.

To test the validity of the new scale, another scale was included, measuring the four items directly on a 9-point Likert-type scale ranging from; 1 = "I absolutely agree" to 9 = "I absolutely disagree". For example the statement for performance-approach is: "In my sport it is important for me to perform better than most of the others of my level do". If individuals with a particular achievement goal scored significantly higher than the group without that achievement goal, validity of the scale was assumed. This was the case for all achievement goals (see table 5), except for individuals who were labelled having a mastery-avoidance goal; ($M_{Mavoi} = 7.08 \ vs. \ M_{NoMavoi} = 7.13$); t (228) = .11, ns. For this reason the latter group was excluded from further data-analysis. This resulted in a sample of 206 individuals.

Social Value Orientation is measured by using eight items of the Decomposed Games (see Van Lange, Otten, De Bruin & Joireman, 1997, for details)³. The task consists of making choices between combinations of outcomes to self and others. Individuals had three choice alternatives, each representing a social value orientation: *prosocial, individualistic,* or *competitive.* An example of the scale can be found in table 4. When five answers (out of eight) were consistent, individuals were classified as prosocial, individualistic, or competitive (e.g., McClintock & Allison, 1989; Van lange & Kuhlman, 1994). For clarity reasons the individualistic and competitive social value orientation were labelled as *'proself'.* Of the 206 respondents, 93 individuals were classified as *prosocial* (45.1%), and 99 as *proself* (48.1%). The latter group consisted of 78 individualistics, and 21 competitives. There were 14 individuals who had no dominant social value orientation (6.8%).

Trust is assessed with a 5-item questionnaire developed by Simons & Peterson (2000). This scale measures '*intragroup trust*', which is the amount of trust among team members. The items reflect elements of trust that have been widely agreed upon (e.g. Butler, 1991; Hosmer, 1995; Mc Allister, 1995) and are measured on a five-item Likert-type scale ranging from; 1 = strongly agree, to 5 = strongly disagree. The average score was computed. Items were phrased as extremes (e.g., "We respect each other completely."). Cronbach's alpha was .80.

² In this test the individuals who reported to have 'no goal' were excluded.

³ The second item of the Decomposed Games questionnaire was omitted due to an error in the questionnaire.

Self-efficacy is measured by using the General Self-efficacy scale of Jerusalem & Schwarzer (1995). This scale was created to assess a general sense of perceived self-efficacy with the aim of predicting how individuals cope with daily hassles, as well as adaptation after experiencing all kinds of stressful life events. It is a 10-item questionnaire rated on a 4- point scale ranging from; 1 = completely agree, to 4 = completely disagree (An example of a statement is; "I'm certain I can achieve my goals." Cronbach's alpha was .85, which is reliable.

Measures on Testmoment 2 (T2).

At T2, three constructs were measured again, for which the same scales were used: achievement goals, self-efficacy and social value orientation.

Achievement Goals. 60 individuals (54.1%), of 111 respondents, had a masteryapproach goal, and 22 had a mastery-avoidance goal (19.8%). There were 13 individuals with a performance-approach goal (11.7%), and 8 individuals with a performance-avoidance goal (7.2%). Finally, 8 individuals had no-goal (7.2%). The observed percentages of individuals' dominant achievement goals deviated from an equal division across the four goals, χ^2 (3, N=75) = 71.7, *p* < .01. For results, see table 7.

On the validity test of the scale, all four achievement goals were scored separately. Again, all four achievement goals scored significantly higher on the four items (see table 6), except the individuals with a mastery-avoidance goal; (M_{Mav} =6.64 *vs*. M_{noMav} =5.57). The *t*-test didn't show a significant difference; *t* (109) =1.96, ns.⁴ To examine the stability of goals, reliable measures were needed on both test moments. Consequently, individuals with a mastery-avoidance goal were excluded from analysis. This resulted in a sample of 89 individuals.

Social Value Orientation. Of the 89 respondents, 46 were classified as *prosocial* (51.7%), and 35 as *proself* (39.3%). The latter group consisted of 26 individuals who were individualistic and 9 competitive. There were 3 respondents who had no dominant social value orientation (3.4%), and 5 persons didn't complete the questionnaire. Conclusively, there was a bigger percentage of prosocials than proselfs, as opposed to the distribution on T1 (See table 7).

Self-efficacy. For generalized self-efficacy a Cronbach's alpha of .85 was found.

⁴ In the online questionnaire, 35 items were scaled from; 1 = "I absolutely agree" to 4 = "I absolutely disagree"). Despite the difference with the original scale, validity analysis remained necessary and relevant

Results

Relation between Achievement Goals and Social Value Orientation

Descriptive data. The distribution of social value orientations among achievement goals are presented in tables 1, and 8. No gender differences were found for achievement goals; χ^2 (2, N = 206) = .18, *ns*, nor for social value orientation; χ^2 (2, N = 206) = .81, *ns*. Among individuals with a mastery goal, 52% is *prosocial*, and 42.9% is *proself* (containing 34.7% *individualistics*, and 8.2% *competitives*). Among the group of individuals with a performance goal, 43.8% is *prosocial* and 52.1% is *proself* (containing 37.5% *individualistics*, and 14.6% *competitives*).

Tabel 1

Distribution of Social Value Orientations among Achievement Goals ³ .
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	Achievement goals						
	Mastery	Performance	No goal	Total			
Social value orientations							
Prosocial	51	21	21	93			
Proself	42	25	32	99			
No dominant orientation	5	2	7	14			
Total	<i>9</i> 8	48	60	206			

Note. The numbers are frequencies.

Observed associations. To examine the possible relation between achievement goals and social value orientation, non-parametric chi-square tests were conducted. To get a general description of this relation, the tests were conducted on the data for the whole sample. This means that individuals who reported to have 'no goal' or 'no dominant social value orientation' were included. The reason for this, is that these groups contain a relatively large proportion of the complete sample, namely 32.5%. The results showed no evidence for a relationship between achievement goals and social value orientations; χ^2 (4, N=206) = 6.48, *ns.* To get a more detailed view, the next tests were performed among individuals who

⁵ Individuals who scored a mastery-avoidance goal were excluded from analysis. This means that 'Mastery goal' refers only to individuals who have a mastery-approach goal. The performance goal contains both performance-approach and – avoidance goals.

reported to have dominant achievement goals and dominant social value orientations, meaning that individuals who reported '*no goal*', and '*no dominant social value orientation*' were excluded from analysis. Results showed no evidence for a relationship between achievement goals and social value orientation χ^2 (1, N=139) = 1.04, *ns*.

Note, that within the group of individuals with a mastery goal, the conditional distribution of prosocials is bigger, and of proselfs is smaller than the concurrent percentages in the total sample (see table 8). Vice versa the conditional distributions within the group of individuals with a performance goal, showed the opposite. However, chi-square tests for proportions revealed that there is no evidence to assume, that individuals with a mastery goal are more often prosocial than proself; χ^2 (1, N=93) = .87, *ns*. Similarly, no significant evidence was found that individuals with a performance goal are more often proself than prosocial; χ^2 (1, N=46) = .35, *ns*. All results considered, hypothesis 1 had to be rejected.

Relation with intra-group trust (IGT). Between subjects *t*-tests revealed that there was no evidence to conclude that individuals with a mastery goal reported more intra-group trust than individuals with performance goals ($M_{Mast} = 3.79 \ vs. \ M_{perf} = 3.78$); t(144) = .06, *ns.* Conclusively, hypothesis 2 was rejected. Results on means, and standard deviations are presented in table 9.

Adding the dimension of valence to the achievement goals, more between subjects *t*-tests were conducted. Results did not give evidence that individuals with a mastery goal reported more IGT than individuals with a performance-approach goal ($M_{Mast} = 3.79 \text{ vs. } M_{Papp} = 3.92$); t(125) = -.91, *ns*. And although individuals with a mastery goal reported more intragroup trust than individuals with a performance-avoidance goal, results were not significant ($M_{Mast} = 3.79 \text{ vs. } M_{Pavoi} = 3.57$); t(115) = 1.3, *ns*. The same results were found when individuals with a performance-approach goal were compared with individuals who had a performance-avoidance goal ($M_{Papp} = 3.92 \text{ vs. } M_{Pavoi} = 3.57$); t(46) = 1.99, *ns*.

Stability of Achievement goals over time and in different contexts

Descriptives. Non-parametric chi-square tests were conducted to examine the stability of achievement goals across the 'competitive context' (T1) and 'neutral context' (T2). The results are presented in table 2. Note, that 40 out 51 (78.4%) reported to have a mastery goal in both contexts, and 9 out of 20 (45%) had a performance goal in both contexts. As on T1, no gender differences were found for achievement goals on T2; χ^2 (2, N=89) = 1.32, *ns.*). Most individuals in the sample, namely 56.2%, kept their preference across both contexts (read; had *stable* achievement goals). The distribution of achievement goals on T2 as a function of goals on T1 are presented in table 2 (an extended version can be found in table 9).

Table 2.

		Achievement goals on T1							
	Mastery	Performance	No goal	Total					
Achievement goals on	T2								
Mastery	40	10	10	60					
Performance	5	9	7	21					
No goal	6	1	1	8					
Total	51	20	18	89					

Achievement Goals in the Neutral Context as a function of goals in the Competitive Context.

Note. The numbers are frequencies.

Stability in achievement goals. the stability of achievement goals was examined, by conducting chi-square tests. First, the tests were conducted on the complete sample presented in Table 2. The results revealed a significant difference between the observed and expected frequency of individuals' achievement goal on T2, as a function of their goal on T1; χ^2 (4, N=89) = 12.99, p < .05.⁶ Individuals who reported a mastery goal in the competitive context were more likely than other goals, to score the same goal in the neutral context. Secondly, in further analysis individuals who reported to have '*no goal*' were excluded. to be able to examine the stability of mastery- and performance goals specifically. Again, the results showed that individuals who reported a mastery goal in the competitive context were more likely to score the same goal in the neutral context than individuals with a performance goal;

⁶ Because 55% of the expected cell counts in the table are below 5, a second analysis was conducted on a twoway table (achievement goals on T1 vs. achievement goals on T2).

 χ^2 (1, N=64) = 10.28, $p \le .01.^7$ Under this condition, the Phi-coëfficient demonstrates that there is 40.1% association between achievement goals in the competitive, and the neutral context; Φ (N=64) = .40, p < 0.05.

Finally, a *z*-test was done to compare the two proportions: respectively, 40 out of 51 (78.4%) reported a mastery goal in both contexts, and 9 out of 20 (45%) scored a performance goal in both contexts. A significant difference was found between the two proportions; Z(64) = 3.21, $p \le .001$ (one sided). Consequently mastery goals are more stable than performance goals, and hypothesis 3 was accepted.

Degree of self-efficacy (SE). Between subject *t*-tests revealed that individuals who scored a mastery goal on T1 didn't report more self-efficacy than those with a performance goal; $(M_{Mas} = 3.07 \text{ vs. } M_{Perf} = 3.07)$, t (144) = .068, *ns*. Similar results were found for individuals who scored a mastery goal on T2; $(M_{Mas} = 3.11 \text{ vs. } M_{Perf} = 3.03)$, t (101) = .77, *ns*. Therefore hypothesis 4a was rejected. Results on means and standard deviations are presented in table 9.

Further analysis, among the group of individuals who had a *stable* achievement goal, revealed that individuals with a mastery goal scored significantly higher on self-efficacy than those with a performance goal, on T1; ($M_{Mas} = 3.16 vs. M_{Perf} = 2.88$), t(47) = 2.01 p < .05. And although individuals with a stable mastery goal had scored higher self-efficacy on T2, than individuals with a stable performance goal, the difference was not significant; ($M_{Mas} = 3.21 vs. M_{Perf} = 3.01$), t(47) = 1.28, ns.

Finally, analysis showed that individuals with a mastery goal reported more self-efficacy than individuals with a performance-avoidance goal ($M_{Mas} = 3.07 vs. M_{Pavo} = 2.88$); t(115) = 2.14, p < .05. This was also the case for individuals with a performance-approach goal ($M_{Papp} = 3.19 vs. M_{Pavo} = 2.88$); t(46) = 2.46, p < .05.⁸

⁷ If non-parametric chi-square tests are used for statistical analyses, and expected counts in a table are below 5 in about 20% of the cells, than Fishers' exact test needs to be applied. In this situation one out of 4 cells (25%) had an expected count below 5. Fishers' exact test resulted in a significant association χ^2 (1, N=64) = 10.28, p = .003⁸ These tests were performed in the competitive context, because the sample size in the neutral context would become too small, resulting in the inability to draw proper scientific conclusions.

Stability of self-efficacy. This variable was measured by calculating the different self-efficacy scores on T1 and T2. The mean difference (i.e. average) on self-efficacy for individuals with a mastery goal is smaller than that of individuals with a performance goal; $(M_{mas} = .05 \ vs. M_{perf} = .13)$. However, between subjects *t*-tests showed that this difference was not significant; *t* (47) = 5.38, *ns*. Consequently self-efficacy was not more stable for individuals with a stable mastery goal than for individuals with a performance goal, and hypothesis 4b was rejected.

General Discussion

The main objectives of this study were, firstly, to relate achievement goals with social value orientations, and secondly, to identify how stable goals are across time and different contexts. Exploring the relationship between achievement goals and social value orientations can help us create a better insight in the interpersonal effects of achievement goals. This is relevant and necessary, because goals are often obtained through social exchange. However, research has long neglected to investigate these interpersonal effects, so little is known of it yet. Therefore we, subsequently, examined the relation between goals and interpersonal trust. The second objective of this study is to identify the stability of dominant achievement goals, as to deepen our understanding of the cross situational generality of dominant achievement goals. Following that objective, identifying the relation between achievement goals and self-efficacy was added.

The empirical results did not detect a significant relationship between achievement goals and social value orientations, meaning that among individuals with mastery goals there is no difference in terms of the distribution of prosocials and proselfs; this is also the case for the group of individuals with performance goals. An explanation for this might be that social behaviours, can result from a proself value orientation, as well as from a pro social value orientation. Consequently, the cooperative behaviors (Midgley, Kaplan & Middleton, 2001), sharing information and reciprocity (Poortvliet et al., 2007), which are related to mastery goals, can also be displayed as a *means* to achieve an individual goal. Note, that most respondents on T2 were having a mastery goal (70.7%), which seems an indicator of a prosocial orientation. Secondly, individuals with performance goals are equally prosocial and proself, as opposed to what we expected. An explanation for this might be that some individuals with performance goals consider pro-social behaviors as a possible show off for their superiority, or as a way to get public recognition from others (Pintrich & Schunk, 1996). Whether these individuals genuinely have a prosocial value orientation, or they answered in a socially desirable way remains unknown. In sum, some social behaviors are an actual display of ones social value orientation, others are displayed as a means to and end, or as a (social) goal by itself.⁹ A second explanation for not finding a relation between achievement goals and social value orientations might be that individuals can have several goals simultaneously (Pintrich, 2000). Furthermore, features of the situation could trigger individuals to adopt

⁹ For an interesting discussion on Social Goals in relation to achievement goals, see Urdan and Maehr (2001).

different achievement goals (Ames, 1984; Church & Elliot, 2001). However, in the dominant achievement goal approach (Van Yperen, 2006) the effects of combinations of the goals on outcome variables *within individuals*, so-called multiple goal models (Barron & Harackiewicz, 2001), cannot be examined. Finally, the relation between achievement goals and social value orientation was analyzed on the dimension of *definition* (mastery vs. performance). An effort was made to distinguish the goals on the dimension of valence (approach vs. avoidance), by using the new instrument of Van Yperen (2006). However, the scale for mastery-avoidance goals didn't discriminate reliably from the other achievement goal scales. Consequently, a more detailed analysis on the relations of the separate achievement goals with social value orientations was not allowed. We suspect that relations between achievement goals and social value orientations might be more evident if the dimension of valence (approach vs. avoidance) could be taken into account.

In this study, no relation was found between achievement goals and interpersonal trust, meaning that individuals with a mastery goal do not experience more trust than those with a performance goal. The reasoning of Poortvliet et al. (2007), namely that individuals with mastery goals have more positive expectations of the intentions of others (read; trust) than individuals with a performance goal do, is not supported by the results in this study. Apparently, sharing high quality information, and adopting a reciprocity orientation are no direct signs of the amount of trust an individual has in others, nor are sharing low quality information and the adoption of an exploitative orientation. Perhaps, the mentioned behaviors could influence the amount of trust, because they might have an effect on interpersonal variables (e.g. mutual respect, shared history). However, this influence would be indirectly, because interpersonal variables is mentioned as one of three other factors that can influence the degree of interpersonal trust (Gambietta, 2000). The other factors are intrapersonal variables, and contextual variables. Logically, it seems impossible to empirically test achievement goals with a mixture of those variables, as it is impossible to control for them. Finally, in this study the construct of mutual trust among team members was measured. Because individuals, who play team sports, often deal with distinct interpersonal relations (i.e. 'parties'), of which the most prominent are team members, and opponents, they might have mixed these two up when they filled in the questionnaire. This is relevant, because there could be a difference in the amount of trust towards team members and opponents; namely, team members often share history, and common goals with each other. It would be an interesting topic to examine in future research.

In both separate contexts individuals reported a clear preference for one particular goal. These results correspond with the results of Van Yperen (2006). Furthermore, most individuals in the sample had stable dominant achievement goals across both contexts (56.2%). Duda and Nicholls (1992) already demonstrated that achievement goals are similar across different situations. It is not real to draw firm conclusions on stability of dominant achievement over time, therefore the time span of two months is to short. However, the present study showed that dominant mastery goals are more stable than dominant performance goals across contexts. Apparently, the self-referenced way of setting goals and measuring success, but also the high amount of intrinsic motivation makes individuals with a mastery goal less sensitive to variation in context than individuals with a performance goal. The latter have a more other-referenced way of setting goals and evaluating outcomes (Van Yperen, 2003), which seems to make them more prone to changes. Note, that these conclusions differ from those of Bong (2001), who stated that performance goals are more stable than mastery goals. Bong (2001) used a different way of measuring; she examined ratio variables and examined correlations across different educational domains. This way of measuring includes the possibility that individuals have more goals simultaneously. In this study, however, nominal variables were used to measure achievement goals, which excluded the possibility to measure if individuals have different goals simultaneously.

This research demonstrated there was no difference in perceived self-efficacy between individuals with a dominant mastery goal and those with dominant performance goals. These findings are not in accordance with those of Philips and Gully (1997), who found that mastery goals were positively related to self-efficacy and performance goals negatively. Perhaps a difference in self-efficacy exists on the valence dimension of achievement goals that levels the degree of self-efficacy. However this couldn't be measured, because individuals with a mastery-avoidance goal were excluded from analysis. Furthermore, combinations of achievement goals within an individual (Barron & Harackiewicz, 2001), interacting with features of a context, might level the degree of self-efficacy. For instance, a football player, who has a dominant mastery goal, but simultaneously adopted a performance goal during a match (i.e. competitive context), might report low self-efficacy after a loss, and high selfefficacy after a win. Note, that among the sample of individuals with a stable achievement goal, dominant mastery goals reported higher self-efficacy than dominant performance goals.

Differently from what was expected, self-efficacy is equally stable for individuals with a dominant mastery goal and individuals with a dominant performance goal. An explanation might be that the outcomes of a competitive match were not controlled for. Namely, a loss

after a game might influence the reported self-efficacy, as opposed to a win. However, it appears as if context doesn't influence the degree to which an individual beliefs he has the capacity to organize and execute the course of action required to produce a desired outcome. In that sense, self-efficacy, among individuals with a *stable* dominant achievement goal, has a '*trait*'-like character.

In sum, the current study leads to the conclusion that there is no relationship between achievement goals and social value orientations, and there is no relation with 'interpersonal trust'. Furthermore, dominant mastery goals demonstrated to be more stable than performance goals. In the interpretation of the results, however, a number of limitations should be taken into consideration.

A deliberate choice was made to use the new-instrument of Van Yperen (2006), with its' forced choice alternatives. This provides the opportunity to generalize on the relation between particular variables. However, the use of categories, or nominal variables, does not allow us to measure the intensity of achievement goals, nor of social value orientations. Even more it doesn't allow to identify causality between variables. It is interesting for future research to broaden it by including ratio variables.

The measuring method allowed us to identify, for which particular goal individuals have a clear preference. However, in checking validity of the scale it appeared that mastery-avoidance goals did not discriminate themselves consistently from the other achievement goals. Consequently, this achievement goal had to be excluded from analysis. As a consequence, this study couldn't contribute to the, yet little, research that has been done on this particular achievement goal (Van Yperen, 2006). It is worth examining the validity of the scale, because inclusion of it in similar research could create more insight in the relation between achievement goals and social value orientations.

The exclusion of mastery-avoidance goals produced a relatively small sample on T2 (N = 89), which made it impossible to examine the relation between achievement goals and social value orientation in both contexts, and compare them. Furthermore, the sample size didn't allow to distinguish between the different sports. Both subjects would be very interesting to examine in future research.

Finally, this study was conducted among individuals who play teamsports. Although there are apparent resemblances between individuals who work in teams, whether it is in sports, or organizations, it might be interesting to ask whether the findings could be generalized to organizational settings.

Despite the mentioned limitations, this study can be of practical and theoretical importance to achievement motivation. Since achievement goals and social value orientations are not related, they should be treated as such. The same thing goes for the amount of trust. This sounds very logical, although it might be very tempting to value an individual who displays social behaviors, as *being* pro-social (read; value an equal distribution of outcomes between themselves and others). Realizing this, can be of use for individuals who have to manage individual, or team goals in a sensible way. An example is a human resource manager who needs to select a new employee. If he is looking for an individual with a dominant mastery goal, and a pro social value orientation, these criteria need to be assessed separately. The findings may also be useful for the sports coach who wants to help a team of athletes achieve their goals. He might assist them by creating awareness on the consequent effects of achievement goals and social value orientation separately.

When contexts change, individuals with mastery goals are more likely to stay stable in their achievement goal than individuals with dominant performance goals. The latter are more likely to adopt a different achievement goal in another context. Connecting this finding with the idea that each particular achievement goal has a distinct profile of characteristics (Van Yperen, 2006), and a tendency toward different social *behaviors* (e.g. Poortvliet et al. 2007) can give useful information on how to manage achievement goals in different contexts. To conclude, the results in this study suggest that more comparisons between different achievement contexts are justified.

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Achievement Goals. A measure for assessing individuals dominant achievement goal.

In mijn sport vind ik het belangrijk om

	r te prest e luut niet	eren da	n de mee	este ande	eren van	mijn niv	reau	Abso	oluut wel
	1	2	3	4	5	6	7	8	9
2 niet	<i>slechter</i> t	e preste	eren dan	de mees	te ander	en van n	nijn nive	au.	
Absc	luut niet	-					-	Abso	oluut wel
	1	2	3	4	5	6	7	8	9
3 het	<i>beter</i> te de	oen dan	waar ik	normaa	l gespro	ken toe i	n staat b	en.	
Abso	luut niet							Abso	oluut wel
	1	2	3	4	5	6	7	8	9
4 het	niet slecht	<i>ter</i> te do	en dan v	waar ik r	ormaal	gesprok	en toe in	staat be	n.
	luut niet					.			oluut wel
	1	2	3	4	5	6	7	8	9

Omcirkel PER VRAAG de letter "A" òf "B"

In mijn sport vind ik het belangrijk om

		Α	Òf		В
1.	А	<i>beter</i> te presteren dan de meeste anderen van mijn niveau.	Of	В	<i>niet slechter</i> te presteren dan de meeste anderen van mijn niveau.
2.	A	het <i>beter</i> te doen dan waar ik normaal gesproken toe in staat ben.	òf	В	het <i>niet slechter</i> te doen dan waar ik normaal gesproken toe in staat ben.
3.	A	<i>beter</i> te presteren dan de meeste anderen van mijn niveau.	òf	В	het <i>beter</i> te doen dan waar ik normaal gesproken toe in staat ben.
4.	A	het <i>niet slechter</i> te doen dan waar ik normaal gesproken toe in staat ben.	òf	В	<i>niet slechter</i> te presteren dan de meeste anderen van mijn niveau.
5.	A	<i>niet slechter</i> te presteren dan de meeste anderen van mijn niveau.	òf	В	het <i>beter</i> te doen dan waar ik normaal gesproken toe in staat ben.
6.	A	het <i>niet slechter</i> te doen dan waar ik normaal gesproken toe in staat ben.	òf	В	<i>beter</i> te presteren dan de meeste anderen van mijn niveau.

- 1. This is a Dutch translation of the original questionnaire by Van Yperen, 2005.
- 2. Scores on each (achievement) goal orientation range from 0 to 3. Individuals with Individuals with a dominant (achievement) goal orientation (score: 3) circle either 1A, 3A, and 6B (Performance-approach), or 1B, 4B, and 5A (Performance-avoidance), or 2A, 3B, and 5B (Mastery-approach), or 2B, 4A, and 6A (Mastery-avoidance).
- 3. In an experimental setting the formulation differs some with the original form (source: Van Yperen, 2005)

Social Value Orientation. A measure to assess Social Value Orientation

In the introduction of each questionnaire there is the clear statement that 'The other' is an unknown person to the participant. The participant never met this person, nor will be meet this person in the future.

(1)	You receive	480	540	480	(5)	You receive	500	500	570
	The other receives	80	280	480		The other receives	500	100	300
(2)	You receive	520	520	580	(6)	You receive	510	560	510
	The other receives	520	120	320		The other receives	510	300	110
(3)	You receive	500	560	490	(7)	You receive	550	500	500
	The other receives	80	280	480		The other receives	300	100	500
(4)	You receive	560	500	490	(8)	You receive	480	490	540
	The other receives	300	500	90		The other receives	100	490	300

- 1. A Dutch version of the questionnaire was administered
- Individuals who score at least 5 scores consistently (out of 8 choices) can be classified. Individuals with fewer than 5 scores are not classified.
- 3. Key to the answers in the questionnaire are:

* Prosocial choices: (MaxJoint en MinDiff)	1c	2a	3c	4b	5a	6a	7c	8b
* Individualistic choices: (MaxOwn)	1b	2c	3b	4a	5c	6b	7a	8c
* Competitive choices: (MaxRel)	1a	2b	3a	4c	5b	6c	7b	8a

Results of independent samples t-test on T1, with four goal-items as validity measure.

	Dominant achievement goals							
	Per	formance	Mastery					
	-approach	-avoidance	-approach	-avoidance				
Scale-items								
Performance-approach	3.45**	-1.10	0.16	-0.71				
Performance-avoidance	-1.43	2.16*	-0.83	-0.36				
Mastery-approach	2.38^{*}	-1.90	4.24**	-5.94**				
Mastery-avoidance	-2.34*	2.30*	-0.98	-0.12				

**: p≤ 0,01

*: p≤0,05

- The demonstrated results in the table are *t*-values.
- If the probability value in the Levene's Test for Equality of Variances is statistically significant then variances are assumed to be *unequal*.

	Dominant achievement goals							
	Per	formance	Mastery					
	-approach	-avoidance	-approach	-avoidance				
Scale-items								
Performance-approach	2.84**	-1.89	0.15	-1.10				
Performance-avoidance	-1.74	2.67**	-0.36	1.03				
Mastery-approach	0.18	-0.97	2.68**	-1.74				
Mastery-avoidance	-2.52*	0.75	-0.08	1.96				

Results of independent samples t-test on T2, with four goal-items as validity measure.

**: p≤ 0,01

*: p≤0,05

- The demonstrated results in the table are *t*-values.
- If the probability value in the Levene's Test for Equality of Variances is statistically significant then variances are assumed to be *unequal*.

	Testmoments					
	T 1 (competitive context)	T2 (Neutral context)				
Achievement goals						
Performance-approach	12.6%	11.7%				
Performance-avoidance	8.3%	7.2%				
Mastery-approach	42.6%	54.1%				
Mastery-avoidance	10.4%	19.8%				
No dominant goal	26.1%	7.2%				
Total	100.0%	100.0%				

Distribution of Achievement Goals on T1 and on T2 (in percentages).

- The total sample on T1 was N = 230 (including individuals who scored a masteryavoidance goal. After this measurement these individuals were removed from the sample).
- The total sample on T2 was N = 111 (including individuals who scored a masteryavoidance goal. After this measurement these individuals were removed from the sample).
- On T1 a considerable number of individuals had '*no dominant goal*', as opposed to the relatively small number of individuals who had '*no dominant goal*' on T2.

	Α	chievement Goals		
	Mastery	Performance	No Goal	Total
Social Value Orientations				
Prosocial	51.0	21.0	21.0	93.0
	44.2	21.7	27.1	93.0
	54.8%	22.6%	22.6%	100.0%
	52.0%	43.8%	35.0%	45.1%
	24.8%	10.2%	10.2%	45.1%
Proself	42.0	25.0	32.0	99.0
	47.1	23.1	28.8	99.0
	42.4%	25.3%	32.3%	100.0%
	42.9%	52.1%	53.3%	48.1%
	20.4%	12.1%	15.5%	48.1%
No Dominant Social Value	5.0	2.0	7.0	14.0
Orientation	6.7	3.3	4.1	14.0
	35.7%	14.3%	50.0%	100.0%
	5.1%	4.2%	11.7%	6.8%
	2.4%	1.0%	3.4%	6.8%
Total	98.0	48.0	60.0	206.0
	98.0	48.0	60.0	206.0
	47.6%	23.3%	29.1%	100.0%
	100.0%	100.0%	100.0%	100.0%
	47.6%	23.3%	29.1%	100.0%

Crosstabulation of Achievement Goals and Social Value Orientations.

Note:

The Cell Format is: - Count

- Expected Count
- % Within Social Value Orientation
- % Within Achievement Goal
- % of Total

	Achievement Goals in Competitive context (T1)							
	Mastery	Performance	No Goal	Total				
Achievement Goals in								
Competitive context (T2)								
Mastery	40.0	10.0	10.0	60.0				
	34.4	13.5	12.1	60.0				
	66.7%	16.7%	16.7%	100.0%				
	78.4%	50.0%	55.6%	67.4%				
	44.9%	11.2%	11.2%	67.4%				
Performance	5.0	9.0	7.0	21.0				
	12.0	4.7	4.2	21.0				
	23.8%	42.9%	33.3%	100.0%				
	9.8%	45.0%	38.9%	23.6%				
	5.6%	10.1%	7.9%	23.6%				
No Goal	6.0	1.0	1.0	8.0				
	4.6	1.8	1.6	8.0				
	75.0%	12.5%	12.5%	100.0%				
	11.8%	5.0%	5.6%	9.0%				
	6.7%	1.1%	1.1%	9.0%				
Total	51.0	20.0	18.0	89.0				
	51.0	20.0	18.0	89.0				
	57.3%	22.5%	20.2%	100.0%				
	100.0%	100.0%	100.0%	100.0%				
	57.3%	22.5%	20.2%	100.0%				

Crosstabulation of Achievement Goals in the Competitive and Neutral Context.

The Cell Format is:	- Count
	- Expected Count
	- % Within Social Value Orientation
	- % Within Achievement Goal
	- % of Total