

2015

Parental goal orientations for their kindergarten children: Introducing the Nuremberg Parental Goal Orientation Scales (NuPaGOS)

Marold Reutlinger
University of Erlangen-Nuremberg

Anke Ballmann
University of Erlangen-Nuremberg

Wilma Vialle
University of Wollongong, wvialle@uow.edu.au

Zhitian Zhang
Beijing Normal University

Albert Ziegler
University of Erlangen-Nuremberg, albert.ziegler@ewf.uni-erlangen.de

Follow this and additional works at: <https://ro.uow.edu.au/sspapers>



Part of the [Education Commons](#), and the [Social and Behavioral Sciences Commons](#)

Recommended Citation

Reutlinger, Marold; Ballmann, Anke; Vialle, Wilma; Zhang, Zhitian; and Ziegler, Albert, "Parental goal orientations for their kindergarten children: Introducing the Nuremberg Parental Goal Orientation Scales (NuPaGOS)" (2015). *Faculty of Social Sciences - Papers*. 2102.
<https://ro.uow.edu.au/sspapers/2102>

Parental goal orientations for their kindergarten children: Introducing the Nuremberg Parental Goal Orientation Scales (NuPaGOS)

Abstract

This study introduces the Nuremberg Parental Goal Orientation Scales (NuPaGOS) which were designed to measure kindergarten children's parents' goal orientations for their children. The postulated four goal orientations are learning goal orientation, performance goal orientation, well-being goal orientation and fear of over-demanding orientation. We expected that the four factors underlie a g-factor. The hypothesis concerning the structure of the goal orientations was confirmed in a study with 203 parents of kindergarten children. Correlational analyses with validation variables provide initial evidence for the concurrent and discriminant validity of the NuPaGOS.

Keywords

scales, orientation, nuremberg, introducing, children, nupagos, kindergarten, goal, their, orientations, parental

Disciplines

Education | Social and Behavioral Sciences

Publication Details

Reutlinger, M., Ballmann, A., Vialle, W., Zhang, Z. & Ziegler, A. (2015). Parental goal orientations for their kindergarten children: Introducing the Nuremberg Parental Goal Orientation Scales (NuPaGOS). *Psychological Test and Assessment Modeling*, 57 (2), 163-178.

Parental goal orientations for their kindergarten children: Introducing the Nuremberg Parental Goal Orientation Scales (NuPaGOS)

Marold Reutlinger¹, Anke Ballmann¹, Wilma Vialle², Zhitian Zhang³ & Albert Ziegler¹

Abstract

This study introduces the Nuremberg Parental Goal Orientation Scales (NuPaGOS) which were designed to measure kindergarten children's parents' goal orientations for their children. The postulated four goal orientations are learning goal orientation, performance goal orientation, well-being goal orientation and fear of over-demanding orientation. We expected that the four factors underlie a g-factor. The hypothesis concerning the structure of the goal orientations was confirmed in a study with 203 parents of kindergarten children. Correlational analyses with validation variables provide initial evidence for the concurrent and discriminant validity of the NuPaGOS.

Keywords: parental goal orientation; kindergarten children; learning goal orientation; performance goal orientation

¹ *Correspondence concerning this article should be addressed to:* Marold Reutlinger, PhD, Chair of Educational Psychology and Excellence Research, University of Erlangen-Nuremberg, Regensburger Straße 160, 90478 Nuremberg, Germany; email: marold.reutlinger@fau.de

² School of Education, University of Wollongong, Wollongong, Australia

³ Beijing Normal University, China

Introduction

Individuals pursue various goals in learning contexts. Goal orientation theories are the attempts to systematize these goals and to identify the reasons why individuals subscribe to them (for reviews, see Ames, 1992; Elliot, 2005; Elliot & Thrash, 2001; Maehr, 2001; Midgley, 2002). Elliott and Dweck (1988) conceptualize goal orientations in learning contexts as a “program” of cognitive processes that have cognitive, affective, and behavioral consequences. Due to the fact that these “programs” extend over a wide range of similar learning contexts, the term “orientation” was used to describe the relative high stability across situations and over time.

Originally, two major types of goal orientations were studied. One type is usually referred to as learning goal, mastery goal or task-involvement goal; the other type is usually referred to as performance goal or ego-involvement goal. However, the concept of goal orientation was subsequently expanded in three different manners. First, additional goals, such as social goals, were designated to complement learning and performance goals (Wentzel, 1991, 1996). Secondly, the concept of goal orientation was considerably elaborated to encompass an integrated pattern of beliefs, attributions and affects that produce the intention of behavior (Ames, 1992). Thirdly, and most important for this paper, the concept was extended to the recipients of the goal orientations, such as teachers or parents (Ziegler, Dresel, & Stoeger, 2008).

Parents are an important source of supervision, advice, encouragement and assistance for their children and especially for their motivation (e.g., Duda & Hom, 1993; Duda & Whitehead, 1998; Ebbeck & Becker, 1994; Kimiecik, Horn, & Shurin, 1996; White, 1998). Ames and Archer (1987) and Dweck and Leggett (1988) contended that parents provide an extremely important context for the development of children’s goal orientations. For example, they suggest that parents who are task- versus ego-oriented may influence their children’s goal orientation quite differently from each other. They propose that, as a function of parents’ achievement goal orientation, children may focus on certain types of activities more than others, might be reinforced for different choices, and might be evaluated on different aspects of their behavior (see also Ames, 1992). Previous research has yielded ample evidence to support this assumption. For example, Kim, Schallert, and Kim (2010) showed that students’ goal orientations were predicted by their perceptions of parental goal orientations, or motivating styles for them. Friedel, Cortina, Turner, and Midgley, (2007) found that 7th grade children’s perceptions of their parents’ goal orientation for them were significant predictors of their own goal orientations.

Similar results have been found in a wide range of domains and also for constructs correlated with goal orientations. For example, Bergin and Habusta (2004) examined the goal orientations of young male ice hockey players and their parents. For ego orientation, boys’ self-ratings correlated significantly with parents’ rating of their goals for their sons. Eccles-Parsons, Adler, and Kaczala (1982) investigated the impact of parents on 5th – 11th grade children with respect to their academic self-concept and related beliefs. They found that parents’ perceptions of, and expectations for, their children were related to both the children’s perceptions of their parents’ beliefs and to the children’s self and task perceptions; further, these were more significantly related to each other than chil-

dren's past performance. All of these results support the socialization hypothesis, which postulates that children develop goal orientations and motivational patterns similar to those of their parents (see also Duda & Hom, 1993; Ebbeck & Becker, 1994; Kimiecik et al., 1996).

Many studies have yielded evidence for a correlation between parenting style and achievements in learning contexts as well as with factors closely related to achievements (e.g., Ablard & Parker, 1997; Chandler, 2006; Ginsburg & Bronstein, 1993; Gutman, 2006; Steinberg, Dornbusch, & Brown, 1992; Taylor, Hinton, & Wilson, 1995). For example, Gutman (2006) found that children whose parents espoused mastery goals had higher grades than their peers whose parents did not espouse mastery goals. In contrast, performance goals of parents may pose a risk-factor. For example, Ablard and Parker (1997) found that parents who pursued performance goals were more likely to have children with dysfunctional perfectionism, whereas parents who pursued learning goals were more likely to have children with healthy levels of perfectionism.

In summing up our brief literature review, we want to emphasize four points: 1) There seems to be a clear correlation between parental goal orientations and their children's goal orientation, motivation, and achievements. This encourages us to pursue this field of research further. However, from the perspective of our research interest we also need to note several shortcomings of the present research. 2) Although a wide range of studies has shown that parental goal orientations are associated with motivational and achievement outcomes for school students (e.g., Ames & Archer, 1987; Midgley, 2002), only a few studies have conducted research with parents whose children are pre-schoolers. 3) Research has focused on parents' own achievement goal orientation, however, our focus is on the goals that parents may have for their children. 4) Parents of kindergarten children may exhibit different goal orientations for their children than do parents of older children. For example, although they may focus on their children's understanding of material and improvement of skills (learning goals) or they may wish that their children perform better than other children (performance goals), they might also focus more on their child's emotional well-being.

Which goal orientations might parents hold for their kindergarten children?

Concerning the fourth point, we followed two lines in order to identify the possible pattern of goal orientations of parents for their kindergarten children. First, we conducted focus group discussions with parents of kindergarten children and, second, we conducted a literature review.

We conducted several informal focus group discussions with parents of kindergarten children (Greenbaum, 2000). The two topics of the discussion were 1) when and 2) why parents would call a day at kindergarten successful for the development of their child. Based on the information we received, we hypothesized that four general goal orientations could be distinguished. Learning goal orientation and performance goal orientation, which closely resemble their well-known predecessors in the literature, were included. In addition we identified two new goal orientations: A well-being goal orientation and a

fear of over-demanding goal orientation. The well-being goal orientation targeted a generally positive emotional state of the child with respect to subjective well-being during a day at kindergarten. The fear of over-demanding goal orientation referred mainly to the misgiving of parents that the kindergarten might engage their child in activities that are not age-appropriate and demand a developmental level the child has not yet reached.

In the next step we investigated the literature in order to find indications of these goal orientations. Similar to the original concept of learning goal orientation (Dweck & Leggett, 1988), we would attribute a learning goal orientation to parents who are more concerned with their child's understanding of material, learning and the improvement of skills rather than with the external indicators of achievement. These parents would focus on continual interest and intellectual development, wanting their children to improve by increasing their understanding of material, enjoying learning, and seeking challenge (Ablard & Parker, 1997). In contrast, parents who are concerned with the validation of their child's competence via external indicators of good performance would be attributed a performance goal orientation (Dweck & Leggett, 1988). These parents would focus on high performance because it signifies competence and high intelligence (cf. Ablard & Parker, 1997). Keeping in mind that in the literature learning and performance goal orientations of parents usually refer to their own achievement goals, there is clear evidence for a connection to their children's corresponding goal orientations. For example, in most research studies the children of learning-focused or mastery-focused parents experience positive learning outcomes, whereas children of performance-focused parents experience negative learning outcomes (e.g., Ablard & Parker, 1997; Friedel et al., 2007; Gutman, 2006). However, it is unclear if parents apply their own goal orientation to their child, and if so, if a learning goal orientation or a performance goal orientation respectively correspond with identical goal orientations for their children and if they have similar positive or negative impacts. Due to the lack of research, the situation is especially unclear for the role of these two goal orientations of parents for their kindergarten children.

Well-being is not a clear-cut concept. Dictionaries define well-being as a desirable state of being happy, healthy, or prosperous, but well-being is also related to the fulfilment of desires, the balance of positive and negative emotions, to living conditions and so on (Ben-Arieh & Frønes, 2011). Thus, although well-being of their child may be an important objective of parents, they may attach different meanings to this objective. From a scientific perspective, child well-being in particular is conceptualized as a multi-dimensional concept. Huebner (1994) argued that child well-being includes the five contexts of family, friends, school, self, and living environment. The OECD proposed that child well-being includes the dimensions of material well-being, housing and environment, education, health and safety, risk behaviors, and quality of school life (Bradshaw, Hoelscher, & Richardson, 2007). Some scholars argued that indicators of children's well-being are empirically related to subjective well-being, such as purpose, gratitude, hope, optimism and self-efficacy (Furlong, You, Renshaw, Smith, & O'Malley, in press; Keyes, 2009). The Multi-National Project for Monitoring and Measuring Children's Well-Being (Ben-Arieh et al., 2001) provided an index which encompasses 50 indicators of five components and 13 subcomponents. If parents do hold a well-being goal orientation – which is still to be shown in this paper – it is clear that their implicit

concept of well-being is not as elaborated as in the reported well-being concepts. Indeed, in the target group discussions on what would make a successful kindergarten day for their child, parents preferred their child to be in a positive emotional state and have a good time. Thus, in this paper when we use the term, well-being goal orientation of parents (for their children), we mainly refer to the parents' concern that their children are in a positive emotional state in kindergarten for most of the day (cf. Diener, 2000).

In the target group discussions, parents expressed their concern that kindergarten educators might excessively push their child. They assumed that every child has their own rate of development and educators should take this into consideration. Thus, for the purposes of our present study we argue that a substantial number of parents tend to hold a fear of their children being too strongly pushed towards learning and development; we term this fear of over-demanding goal orientation. We further assume that these parents tend to create a lenient environment for their children without high aspirations and control. The research literature contains evidence that there is not only a significant number of parents who do not want their children pushed. Indeed, many regard pushing as something that should generally be avoided. Especially in western cultures, people value individuality and independence highly, and therefore western teenagers can feel rejected when their parents exert a great deal of control. Sorkhabi (2013) calls these parents non-demanding parents who may not have a rule or expectation, or who may have a rule or expectation but do nothing to directly enforce that rule. To some extent, democratic mothers are more non-demanding than authoritative or directive mothers and not as responsive as the authoritative ones. Although limited research has been conducted on how the fear of over-demanding influences students' development, one can get some indication from parenting style and parents' child-rearing beliefs. For example, Jacob (2011) examined the relationship between intelligence and state achievement test scores in relation to perceived parental involvement, expectation and parenting style. Results show that the best predictor of academic achievement in mathematics was the students' perception that their parents were demanding. Baumrind (1991) found that the children of authoritative parents who are highly demanding and highly responsive were remarkably successful in their education. Similarly, Kent and Davis (1957) found that children of demanding parents scored higher on the Stanford-Binet than did children of normal parents, and that there were no differences in reading and WISC performance scale scores. Browne and Rife (1991) found that at-risk students viewed their parents as less demanding and more casual in their expectations. Thus, previous research presents mixed findings on the relation between (perceived) parents' demanding level and children's development. Furthermore, there is little research that directly examined the parents' level of demanding in relation to pre-schoolers.

Although parental goal orientations have also been perceived as opposing behavioral tendencies (Dweck & Leggett, 1988) this is probably not the case. For example, Friedel et al. (2007) found that a perceived parental mastery goal orientation was positively correlated with a perceived parental performance goal. Similar results were obtained by Bergin and Hagusta (2004), Gonida (2007), and Kim, Schallert, and Kim (2010).

Empirical Study

Aim of the present study

In the present study, we pursued three major objectives. First, we wanted to examine the factorial validity of the four hypothesized parental goal orientations for their kindergarten children: learning goal orientation, performance goal orientation, well-being goal orientation, and fear of over-demanding goal orientation. In contrast to most of the research conducted previously, we measured the four goal orientations directly with the parents and not the perceived goal orientations of the child.

We were also interested in the structure of the four goal orientations. Based on our target group discussions and on prior literature to perceived goal orientations, we assumed that the four goal orientations are not independent of each other and that a common motivational g-factor might underlie them.

The third objective was to find initial evidence for the concurrent and the discriminant validity of the four parental goal orientations. For this purpose we used items from the Affordances in the Home Environment for Motor Development-Infant Scale (Bradley, Caldwell, Rock, et al., 1989; Caldwell & Bradley, 1984).

Method

Participants

A total of 203 German parents of kindergarten children (111 girls and 92 boys; age $M = 4.5$ years) participated in the research. At least one parent filled out the parental questionnaire for each child. For 146 children, the questionnaire was completed by the mother, for 27 children by the father, and for 30 children by both parents.

Measures

Nuremberg Parental Goal Orientation Scales (NuPaGOS). The NuPaGOS consist of four subscales comprising seven items each: Learning goal orientation (sample item: *It is important to me that my child learns new words*), performance goal orientation (sample item: *It is important to me that my child is smarter than his/her peers*), well-being goal orientation (sample item: *It is important to me that my child feels happy*), fear of over-demanding goal orientation (sample item: *It is important to me that they place not too heavy weight on learning in the kindergarten*). Respondents answered on a 5-point Likert scale ranging from 1=wrong to 5=correct. The scales proved sufficiently homogeneous as indicated by Cronbach's alphas. Reliabilities were for learning goal orientation = .94, performance goal orientation .95, well-being goal orientation .749, and fear of over-demanding goal orientation .70.

Affordances in the Home Environment for Motor Development-Infant Scale (AHEMD) (Bradley, Caldwell, Rock, et al., 1989; Caldwell & Bradley, 1984). The AHEMD is a reliable and valid parental self-report assessment that addresses the quality and quantity of factors in the home that are conducive to the development of children, especially their motor development (Gabbard, Caçola, & Rodrigues, 2008; Rodrigues, Saraiva, & Gabbard, 2005). It is widely used and has been translated from English into several languages including German, Arabic, Chinese, Dutch, French, and Portuguese. For the present validation purposes we made use of selected parts of the AHEMD which should plausibly be connected with the NuPaGOS. Four items were used to validate the learning goal orientation and the performance goal orientation. We assumed that if parents hold a learning goal orientation they should more frequently indicate that *The child's activity allows her/him to learn something* and engage their child in play activities that enable their children to learn, such as play with more competent individuals. Thus we expected higher agreement with the item *Adults are playing regularly with the child*. We assumed that parents with a performance goal orientation would more often indicate that *The child is in a competitive situation to other children*. As a performance goal orientation requires as a sine qua non that the child plays with other children, we also expected a correlation with the item *Child likes to play with other children*. In line with previous research that showed that learning goal orientations and performance goal orientations might lead to opposing behavioral tendencies, we assumed an opposite correlational pattern of the parental goal orientations and the observed behaviour of their children. Thus, though the four items had the disadvantage of being single items, they offered the advantage of shedding some light on the discriminant validity of these two parental goal orientation scales.

For the validation of the well-being orientation scale we assumed that parents with a high well-being orientation should be more willing to provide their children with a home environment that fosters the well-being of the children. In relation to this, there were five items which were especially informative: Easily reachable playground; Number of rooms in the house/flat; Time living in the house/flat; Enough space outside the living place; Special place for the child's toys. Of course, the capacity to provide these infrastructural amenities to their children is limited by various factors such as the affluence of the parents. However, parents with a more pronounced well-being orientation should attach more weight to providing such an environment and this should lead to positive correlations.

For the validation of the fear of over-demanding scale, we formed an index of available toys that were clearly non-demanding. To form this index, we asked three experts to rate all the toys -- whose availability in the home of the child was included in the AHEMD -- with regard to how easily they could make the child believe that he or she does not possess the necessary skills to play with them successfully. High-demanding toys were, for example, musical instruments or toys that need high fine motor skills. Non-demanding toys comprised the categories of stuffed animals/cuddle toys; gross motor skill exploratory behaviour; rolling around; and, passive listening such as listening to media. From the 26 rated toys, we used one third of the highest rated toys to form the non-demanding toys scale. The Cronbach's α of this scale was .72.

Data analysis

Confirmatory Factor Analysis (CFA) was conducted for the parental goal orientation scale to identify distinct but correlated latent factors. We calculated the means of each scale and conducted CFA by finding a g-factor of the four scales.

CFA was estimated using Mplus6 software package using full-information maximum likelihood (FIML; Raykov, 2005). This analysis allows the use of all data, which means that there is no listwise deletion of a parent's information if one observation in one variable is missing.

The model's goodness of fit was assessed using Chi-square Fit Statistics, Root Mean Square Error of Approximation (RMSEA), Comparative Fit Index (CFI) and Tucker-Lewis index (TLI). Small and non-significant Chi-square indicates better fit. RMSEA incorporates a penalty function for poor model parsimony. Values equal to or below .08 suggest close approximate fit (Hu & Bentler, 1999). CFI and TLI represent incremental fit indices contrasting the hypothesized model to a more restricted nested baseline model. Both values above .9 indicate good fit (Kline, 2005). All fit indices were considered in evaluating the model fit and the best model was determined by the best overall fit indices.

Subsequently, correlation between children information items and parental goal orientation were conducted to examine the concurrent and discriminant validity of the NuPaGOS.

Results

Descriptive statistics

Table 1 contains means and standard deviations of the NuPaGOS and the variables used for validation. Interestingly, parents subscribed most strongly to a well-being goal orientation, and the least to a fear of over-demanding goal orientation. Table 2 shows the inter-correlations between the four subscales of the NuPaGOS with some unexpected correlations. Though a learning goal orientation and a performance goal orientation correlating negatively is in line with original theoretical assumptions, later research has also pointed to a possible positive relationship (Bergin & Hagusta, 2004; Friedel et al., 2007; Gonida; 2007; Kim, Schallert, & Kim, 2010). The correlational pattern with the fear of over-demanding goal orientation is surprising, too. For example, a learning goal orientation is usually considered to enable somebody to take risks and to deal with setbacks and failure in an adaptive way (e.g., Dweck, 1999). However, we found a substantial positive correlation between learning goal orientation and fear of over-demanding goal orientation. It is also unclear why fear of over-demanding goal orientation correlated moderately negatively with a performance goal orientation. Alone the moderate correlation between fear of over-demanding goal orientation and well-being orientation seems plausible as demands that are too high can endanger subjective well-being because they might cause setbacks and failures.

Table 1:
Descriptive statistics for used scales and items.

NuPaGOS	M	SD
Learning goal orientation	3.50	1.09
Performance goal orientation	3.28	1.13
Well-being goal orientation	4.61	0.46
Fear of over-demanding goal orientation	2.94	0.77
Validation-Variables		
Child likes to play with other children	1.16	0.37
Other adults are playing regularly with the child	1.64	0.48
The child's activity allows her/him to learn something	1.38	0.61
The child is in a competitive situation to other children	1.82	0.84
Easy reachable playground	1.08	0.28
Equipped playing area close to the living place	1.25	0.44
Own room/ playroom	1.13	0.34
The child can choose her/his activity/toy independently	1.06	0.24

Table 2:
Inter-correlations between the four subscales of the NuPaGOS.

	Performance goal orientation	Well-being goal orientation	Fear of over- demanding goal orientation
Learning goal orientation	-.340**	.169*	.527*
Performance goal orientation		-.087	-.414**
Well-being goal orientation			.336**

* = Correlation is significant at the 0.05 level (2-tailed)

** = Correlation is significant at the 0.01 level (2-tailed)

Factorial validity of the NuPaGOS

The first aim of the present study was to identify four distinct parental goal orientations and the second aim was to examine if a common g-factor is underlying them. Thus, we tested the model depicted in Figure 1. As shown in Table 2, the CFA confirmed four distinct parental goal orientations and a common g-factor.

Table 3:
Results of the CFA.

χ^2	df	χ^2/df	P value (chi-square)	CFI	TLI	RMSEA	SRMR
4.310	2	2.155	0.1159	0.982	0.946	0.075	0.029

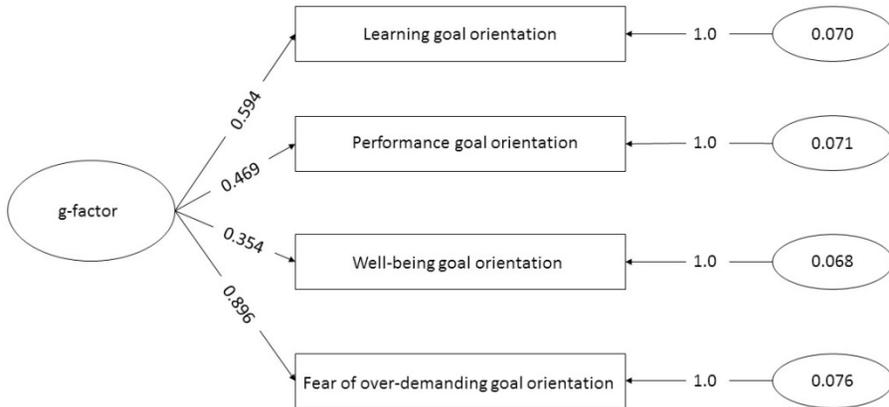


Figure 1:
The g-factor model of the parental goal orientations.

Concurrent and discriminant validation of the NuPaGOS

Bivariate correlations were calculated between the parental goal orientations and the validation variables with α set at 0.05 and 0.01 (one-tailed). As is shown in Table 4, the correlations of learning goal orientation and performance goal orientation with the validation variables have invariably opposite signs. Moreover, all signs are in the predicted direction, thus confirming both concurrent and discriminant validity.

Table 5 displays the correlations of the well-being goal orientation scale with its validation variables. These variables were chosen because they reflect the parents' wish to provide their child with an environment that presumably fosters his or her well-being. Though the correlations were only weak to moderate, they were all statistically significant and in the expected direction.

The fear of over-demanding goal orientation scale was validated with the choice of non-demanding toys scale. The correlation between this scale and the fear of over-demanding goal orientation scale remained significant even after controlling for the number of toys at home ($r = .375^{**}$).

Table 4:
Correlation between learning goal orientation and performance goal orientation with the validation variables.

	Learning goal orientation	Performance goal orientation
Child likes to play with other children	-.232**	.315**
Other adults are playing regularly with the child	.371**	-.363**
The child's activity allows her/him to learn something	.190**	-.157*
The child is in a competitive situation to other children	.153*	-.325**

* = Correlation is significant at the 0.05 level (1-tailed)

** = Correlation is significant at the 0.01 level (1-tailed)

Table 5:
Correlations between the well-being goal orientation scale and the validation variables.

	Well-being goal orientation
Easy reachable playground	.123*
Number of rooms in the house/flat	.399**
Time living in the house/flat	.367**
Enough space outside the living place	.245**
Special place for the child's toys	.218**

* = Correlation is significant at the 0.05 level (2-tailed)

** = Correlation is significant at the 0.01 level (2-tailed)

Discussion

Parental goal orientation for their children is usually conceptualized from the perspective of the child as the perceived parental goal orientation (e.g., Ablard & Parker, 1997; Chandler, 2006; Ginsburg & Bronstein, 1993; Gutman, 2006; Steinberg, Dornbusch, & Brown, 1992; Taylor, Hinton, & Wilson, 1995). This approach presupposes that the child is able to form complex representations and abstractions of parents' behavior. However, this ability is questionable in the case of kindergarten children. Thus, we took a different approach in our study and directly measured the goal orientations of the parents. But our approach deviated in a second regard from mainstream research. Usually researchers are interested in the parents' self-related goal orientation (Bergin & Hagusta, 2004; Gonida, 2007; Kim, Schallert, & Kim, 2010). However, we hypothesized that the self-related goal

orientation and the goal orientation for the child might differ. Thus, we were interested in the parents' goal orientation for their children.

We introduced in this paper the NuPaGOS which comprises four sub-scales measuring parental learning goal orientation, performance goal orientation, well-being orientation and fear of over-demanding goal orientation for their kindergarten children. Internal consistencies of the sub-scales were satisfactory. We assumed a hierarchical structure of the sub-scales with four identifiable factors and a common g-factor. The CFA confirmed this expectation. Without further research it is highly speculative what this g-factor exactly represents. However, an educated guess would be a general care for the child. For example, we would expect that a high g-factor is associated with a parent's higher engagement in the education of their children and with more active support. It will be interesting to see if further research supports this assumption.

Analyses of the inter-correlations of the sub-scales yielded some unexpected significant correlations between the goal orientations. The negative correlation between learning goal orientation and performance goal orientation is in line with previous assumptions concerning the relationship between these (self-related) goal orientations (Dweck & Leggett, 1988), but is somewhat surprising in light of later findings of a positive relationship between these two goal orientations (e.g., Bergin & Hagusta, 2004; Friedel et al., 2007; Gonida, 2007; Kim, Schallert, & Kim, 2010). It is not clear whether this result is a consequence of measuring parental goal orientation for their child instead of their self-related goal orientations or because we studied kindergarten children who were younger than participants in other studies; or the result may reflect a combination of these possible reasons. Unexpected also was the correlational pattern of the fear of over-demanding goal orientation. In particular the positive correlation with the learning goal orientation is difficult to explain as the latter goal orientation is usually considered a resilience factor to cope with failure and setbacks (e.g., Dweck, 1999). However, a plausible explanation is that parents holding a learning goal orientation might be well aware of the risks involved in learning and were especially sensitive to ensure that the negative consequences of failure and setbacks were mitigated. However, if this explanation is correct, the negative correlation between the fear of over-demanding goal orientation and the performance goal orientation would imply that parents who want their child to compete successfully with other children are less sensitive to the emotional costs for their child if the competition becomes too demanding.

For concurrent and discriminant validation of the NuPaGOS we used selected parts of the AHMED (Bradley, Caldwell, Rock, et al., 1989; Caldwell & Bradley, 1984). The latter instrument is a parental self-report assessment that addresses the quality and quantity of factors in the children's home (Gabbard, Caçola, & Rodrigues, 2008; Rodrigues, Saraiva, & Gabbard, 2005). Four items were used to validate the learning goal orientation and the performance goal orientation. The correlations turned out to be significant in the expected direction, thus yielding concurrent validation of the two scales, whereas the opposing correlational pattern of the two goal orientation scales confirmed their discriminant validity. For the validation of the well-being goal orientation scale, we used the items of the AHMED which indicated a home environment that seems especially suited to foster the child's well-being. The correlations were in the expected direction. For the

validation of the fear of over-demanding scale, we were interested if the parents who subscribe to this goal orientation would also choose non-demanding toys for their children. This expectation was also confirmed.

In conclusion, this initial attempt to validate the NuPaGOS led to encouraging results. However, we also need to point out two limitations of the study. A serious limitation is that we predominantly used single items for validation. Another shortcoming is that so far the validation has only been based on data delivered by the parents. In further studies there will need to be additional data collected from the child in order to determine if parental goal orientations influence their child's behavior.

References

- Ablard, K.E., & Parker, W.D. (1997). Parents' achievement goals and perfectionism in their academically talented children, *Journal of Youth and Adolescence*, *26*(6), 651-667.
- Ames, C. (1992). Classrooms: Goals, structures and student motivation. *Journal of Educational Psychology*, *84*(4), 261-271.
- Ames, C., & Archer, J. (1987). Mothers' beliefs about the role of ability and effort in school learning. *Journal of Educational Psychology*, *79*, 409-414.
- Baumrind, D. (1991). The influence of parenting style on adolescent competence and substance use. *The Journal of Early Adolescence*, *11*(1), 56-95.
- Ben-Arieh, A., & Frønes, I. (2011). Taxonomy for child well-being indicators: A framework for the analysis of the well-being of children Asher. *Childhood*, *18*, 460-476. doi:10.1177/0907568211398159
- Ben-Arieh, A., Kaufman, N. H., Andrews, A. B., Goerge, R., Lee, B. J., & Aber, L. (2001). *Monitoring and measuring children's well-being*. Dordrecht, Netherlands: Kluwer Academic Publishers. doi:10.1007/978-94-017-2229-2
- Bergin, D.A., & Habusta, S.F. (2004). Goal orientations of young male ice hockey players and their parents. *The Journal of Genetic Psychology: Research and Theory on Human Development*, *165*(4), 383-397.
- Bradley, R.H., Caldwell, B.M., Rock, S.L. et al. (1989). Home environment and cognitive development in the first 3 years of life: a collaborative study involving six sites and three ethnic groups in North America. *Developmental Psychology*, *25*(2), 217-235.
- Bradshaw, J., Hoelscher, P., & Richardson, D. (2007). An index of child well-being in the European Union. *Social Indicators Research*, *80*, 133-177.
- Browne, C. S., & Rife, J. C. (1991). Social, personality, and gender differences in at-risk and not-at-risk sixth-grade students. *The Journal of Early Adolescence*, *11*(4), 482-495. doi:10.1177/0272431691114006
- Caldwell, B.M. & Bradley, R.H. (1984). *Home observation for measurement of the environment*. Little Rock, Ark.: University of Arkansas at Little Rock.

- Chandler, M., (2006). *The influence of parenting style and ethnicity on academic self-efficacy and academic performance*. Unpublished Senior Honors Thesis, Texas A & M University. Retrieved from <http://hdl.handle.net/1969.1/3717>.
- Diener, E. (2000). Subjective well-being: The science of happiness and a proposal for a national index. *American Psychologist*, 55, 34–43. doi:10.1037/0003-066X.55.1.34
- Duda, J.L., & Hom, H.L. (1993). Interdependencies between the perceived and self-reported goal orientations of young athletes and their parents. *Pediatric Exercise Science*, 5, 234–241.
- Duda, J.L., & Whitehead, J. (1998). Measurement of goal perspectives in the physical domain. In J.L. Duda (Ed.), *Advances in sport and exercise psychology measurement* (pp. 21–48). Morgantown, WV: Fitness Information Technology.
- Dweck, C.S. (1999). *Self-theories*. New York: Harper.
- Dweck, C.S., & Leggett, E.L. (1988). A social cognitive approach to motivation and personality. *Psychological Review*, 95, 256-273.
- Ebbeck, V., & Becker, S.L. (1994). Psychosocial predictors of goal orientations in youth soccer. *Research Quarterly for Exercise and Sport*, 65, 355–362.
- Eccles-Parsons, J.E., Adler, T.F., & Kaczala, C.M. (1982). Socialization of achievement attitudes and beliefs: parental influences. *Child Development*, 53(2), 310–321.
- Elliot, A.J. (2005). A conceptual history of the achievement goal construct. In A.J. Elliot, C.S. Dweck (Eds.), *Handbook of competence and motivation* (pp. 52-72). New York: Guilford Publications.
- Elliot, A.J., & Thrash, T.M. (2001). Achievement goals and the hierarchical model of achievement motivation. *Educational Psychology Review*. 13(2), 139-156.
- Elliott, E.S.; Dweck, C.S. (1988) Goals: An approach to motivation and achievement. *Journal of Personality and Social Psychology*, 54(1), 5-12.
- Friedel, J. M., Cortina, K. S., Turner, J. C., & Midgley, C. (2010). Changes in efficacy beliefs in mathematics across the transition to middle school: Examining the effects of perceived teacher and parent goal emphases. *Journal of Educational Psychology*, 102(1), 102-114. doi:10.1037/a0017590
- Friedel, J. M., Cortina, K. S., Turner, J. C., & Midgley, C. (2007). Achievement goals, efficacy beliefs and coping strategies in mathematics: The roles of perceived parent and teacher goal emphases. *Contemporary Educational Psychology*, 32(3), 434-458. doi:10.1016/j.cedpsych.2006.10.009
- Furlong, M. J., You, S., Renshaw, T., Smith, D. C., & O'Malley, M. D. (in press). Preliminary development and validation of the social and emotional health survey for secondary school students. *Social Indicators Research*.
- Gabbard, C., Caçola, P., & Rodrigues, L.P. (2008). A new inventory for assessing affordances in the home environment for motor development (AHEMD-SR). *Early Childhood Education Journal*, 36, 5-9.
- Ginsburg, G.S. & Bronstein, P. (1993). Family factors related to children's intrinsic/extrinsic motivational orientation and academic performance. *Child Development*, 64, 1461-1474.

- Gonida, E.N., Kiosseoglou, G., & Voulala, K. (2007). Perceptions of parent goals and their contribution to student achievement goal orientation and engagement in the classroom: Grade-level differences across adolescence. *European Journal of Psychology of Education, 22*(1), 23-39. doi:10.1007/BF03173687
- Greenbaum, T. (2000). *Moderating focus groups*. Thousand Oaks, California: Sage.
- Gutman, L. M. (2006). How student and parent goal orientations and classroom goal structures influence the math achievement of African Americans during the high school transition. *Contemporary Educational Psychology, 31*(1), 44-63. doi:10.1016/j.cedpsych.2005.01.004
- Hu, L., & Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling, 6*(1), 1-55.
- Huebner, E.S. (1994). Preliminary development and validation of a multidimensional life satisfaction scale for children. *Psychological Assessment, 6*, 149-158.
- Jacob, J.K. (2011). An examination of the relationship between intelligence and state achievement test scores in relation to the perceived parental expectations, involvement and parenting style of middle school students. *Dissertation Abstracts International Section A, 71*, 3529.
- Kent, N., & Davis, D.R. (1957). Discipline in the home and intellectual development. *British Journal of Medical Psychology, 30*, 27-33.
- Keyes, C.L.M. (2009). The nature and importance of positive mental health in America's adolescents. In R. Gilman, E.S., Huebner, & M.J. Furlong (Eds.), *Handbook of positive psychology in schools* (pp. 9-23). New York: Routledge.
- Kim, J., Schallert, D.L., & Kim, M. (2010). An integrative cultural view of achievement motivation: Parental and classroom predictors of children's goal orientations when learning math in Korea. *Journal of Educational Psychology, 102*(2), 418-437.
- Kimiecik, J.C., Horn, T. S., & Shurin, C. S. (1996). Relationships among children's beliefs, perceptions of their parents' beliefs, and their moderate-to-vigorous physical activity. *Research Quarterly for Exercise and Sport, 67*, 324-336.
- Kline, R. B. (2005). *Principles and practice of structural equation modeling* (2nd ed.). New York: Guilford.
- Maehr, M.L. (2001). Goal theory is not dead - not yet, anyway: A reflection on the special issue. *Educational Psychology Review, 13*(2), 177-185.
- Midgley, C. (2002). *Goals, goal structures, and patterns of adaptive learning*. Mahwah, NJ: Erlbaum.
- Rodrigues, L., Saraiva, L., & Gabbard, C. (2005). Development and construct validation of an inventory for assessing the home environment for motor development. *Research Quarterly for Exercise and Sport, 76*, 140-8.
- Raykov, T. (2005). Analysis of longitudinal data with missing values via covariance structure modeling using full-information maximum likelihood. *Structural Equation Modeling, 12*, 331-341.

- Sorkhabi, N. (2013). How variations in parents' use of confrontive and coercive control relate to variations in parent-adolescent conflict, adolescent disclosure, and parental knowledge: Adolescents' perspective. *Journal of Child and Family Studies*, *23*(7), pp 1227-1241.
- Steinberg, L., Dornbusch, S., & Brown, B. (1992). Ethnic differences in adolescent achievement: An ecological perspective. *American Psychologist*, *47*, 723-729.
- Taylor, L., Hinton, I., & Wilson, M. (1995). Parental influence on academic performance in African-American students. *Journal of Child and Family Studies*, *4*(3), 293-302.
- Wentzel, K.R. (1991). Social and academic goals at school: Achievement motivation in context. In M. Maehr & P. Pintrich (Eds.), *Advances in motivation and achievement* (vol. 7, pp. 185-212). Greenwich, CT: JAI Press.
- Wentzel, K. R. (1996). Social goals and social relationships as motivators of school adjustment. In J. Juvonen, & K.R. Wentzel (Eds.), *Social motivation: understanding children's school adjustment* (pp. 226-247). New York: Cambridge University Press.
- White, S.A. (1998). Adolescent goal profiles, perceptions of the parent-initiated motivational climate, and competitive trait anxiety. *Sport Psychologist*, *12*, 16-18.
- Ziegler, A., Dresel, M., & Stoeger, H. (2008). Addressees of performance goals. *Journal of Educational Psychology*, *100*, 643-654.