Men and Women - What Else?

Gender Role Types and their Effects on Objective Career Success over time	Gender Role T	ypes and their Effects	on Objective C	Career Success	over time.
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Submitted to:

2009 Annual Meeting of the Academy of Management, August 7-11, Chicago, Illinois.

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ABSTRACT

Drawing on conceptualizations of Pierre Bourdieu's (1930-2002) theory of field, habitus, and capital, as

well as on a divergent (i. e., non-bipolar) reconstruction of gender, this paper analyzes the (joint) role of

both gender and so-called gender role types for objective career success (income), relying on data from

two cohorts of business school graduates. Based on the idea that gender and gender role types are part of

career habitus, which progressively affects objective career success over time, the paper adopts a longi-

tudinal perspective and assumes that both gender and gender role type (GRT) show their effect on in-

come over time, with men achieving a higher income than females and masculine GRT being the most

successful type for men, while being androgynous is the most successful female GRT. The results sug-

gest that over time both gender (as predicted) and GRT are significant predictors of income, but the re-

sults concerning the interaction between gender and GRT are weaker and vary between the two cohorts.

Keywords:

Career; Gender; Longitudinal Study

INTRODUCTION

Gender is critical in career research not only because it leads to different career experiences (see e.g.

Banks et al., 1992; Cleveland, Stockdale, & Murphy, 2000; Lyness & Thompson, 1997; Mallon & Co-

hen, 2001; Powell & Mainiero, 1992; Powell, Butterfield, & Parent, 2002), but also because it is a cen-

tral antecedent of career success (Melamed, 1995). There is ample evidence that gender either directly

(see e. g. Stroh, Brett, & Reilly, 1992) or indirectly (see, e. g. Ng, Eby, Sorensen, & Feldman, 2005) in-

fluences career success. Examples include career motivation and choices (e.g. Astin, 1984, Correll, 2001,

Farmer, 1985), hierarchical advancement to top positions (e.g. Tharenou, 1999) or income (e.g. Born-

mann & Enders, 2004). However, a closer look reveals that two key issues deserve more in-depth analy-

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sis when looking at the link between gender and career success: first, the effects of conceptualizing gender beyond a bipolar category where possession of masculine qualities precludes the possession of feminine qualities and vice versa and, second, the changing influence of gender on career success over time. Regarding the conceptualization of gender, current gender research offers a number of developments that go beyond the classical male/female dichotomy (see e. g. Bem, 1993; Block, 1978). Concepts such as gender role orientations (Eckes, 2004) allow both men and women to express their gender in different ways, thus overcoming the strict dichotomy of male/female. This illustrates the importance of refining the gender construct and use more differentiated concepts in order to gain a better understanding of the role of gender for career success. The changing influence of gender on career success over time addresses two aspects. At the micro level, addressing change points towards developments during one's career, thus emphasizing the changing dynamics during different phases of a career. At a macro level, changes at the cultural and institutional level such as societal norms about women working fulltime or legal regulations about parental leave or the provision of child care influence how individuals and their (expression of) gender are perceived in the context of work, in turn influencing individuals' careers and career success.

This paper picks up both key issues, i.e. a more differentiated conceptualization of gender and the temporal perspective, and analyzes how biological sex category and gender role type influence objective career success over time. Conceptually, it transcends the male/female dichotomy of gender by using gender role types as key independent variables, reflecting a two-dimensional view of gender where both males and females can combine different levels of masculinity and femininity (Abele, 1994; Eckes, 2004). The paper conceptualizes these orientations as part of individuals' career habitus, a concept rooted in Bourdieu's theory of practice (see e. g. Bourdieu, 1977; 1986; 1990a) that has been used in career research before (see, e.g. Mayrhofer et al., 2004), thus providing a link between the micro and the macro level of careers. Empirically, the analysis uses a longitudinal sample of two cohorts of business school graduates leaving a large Central European university in 1990 and 2000, respectively, and looks

at the effects of different types of gender role orientations on objective career success, i.e. income, and its changes during the first years of career for two different cohorts.

Dealing with both key issues in career success research is important for a number of reasons. Going beyond a simple dichotomous concept of gender allows a more in-depth insight into the role of gender for career success, leading to a more appropriate conceptualization of gender as a major construct in career success research and complementing the existing knowledge about influencing factors on career success. The explicit inclusion of the temporal dimension by looking at the development of effects over time gives credit to the dynamic quality of careers and the influencing factors of career success. As a consequence, this avoids a merely static "snapshot" view of careers. Finally, although this paper does not focus on the macro level of the temporal context in which careers unfold, it still touches on that topic by including careers from two separate cohorts, which adds to the picture of influencing factors on career success beyond the person and the organizational context.

In doing so, the paper makes three core contributions to career research. First, it provides a better and more fine-grained understanding of a gender as a crucial variable relevant for career outcomes that is linked with the broader context careers are embedded in. Second, by drawing on literature from the gender discussion and from macro-sociology, the paper builds bridges across different disciplines, thus providing a more comprehensive picture of influences on career success while, at the same time, actively responding to the frequent calls for more interdisciplinarity. Third, the paper explicitly includes a temporal dimension built into careers. By focusing on the process-nature of careers and also looking at the macro-level of changing cultural and institutional conditions, the dynamics of careers are better understood.

THEORETICAL BACKGROUND

Sex, Gender, and Gender Role Types

Albeit organic and somatic differences, distinguishing between sexes on a reproduction level (e.g. chromosomes, gonads, parental care organs, see Reimers, 1994: 19) remain more or less uncontested and scholars agree on the differentiation between biological ("sex") and sociological ("gender") sex (Hermann, 2004), further ontological and nomological disaccords exist. For example, (descriptive) gender roles are based on behavior expectations and are thus part of gender stereotypes (Eckes, 2004: 165), which themselves are rather prescriptive in nature. Parsons (1955), for instance, has labeled feminine roles as "expressive", indicating that women are said to possess expressive, interpersonally oriented qualities, whereas male roles are "instrumentally" goal-orientated, and striving for independence. However, Bakan (1966), who proposes a differentiation between agency (self-assertion, male roles) and communion (selflessness, feminine roles) as well, stressed the developmental task of balancing both principles individually. Gender role types then are the results of this effort: a concurrence of biological, social, and psychological processes of gender differentiation (Eckes, 2004: 167). The idea behind this concept is a two-dimensional view of gender, which is rooted in the androgyny debate (see Bem, 1993; Bock, 2004). Masculine gender-typed persons score high on stereotypically male oriented scales, whereas they score low on stereotypically female oriented scales, the reverse is true for feminine gendertyped persons. People who score low on both scales are "undifferentiated", people scoring high on both are labeled "androgynous" (see Figure 1).

Insert Figure 1 about here

Gender role orientation linked with these gender role types has a greater influence on cognitions and behavior than biological sex (Abele, 1994: 33). For example, gender role orientation affects the choice of major subject (Harren, Kass, Tinsley, & Moreland, 1979) as well as occupational choice (Clarey & San-

ford, 1982; Williams & MucCullers, 1983), or career related attitudes (Marshall & Wijting, 1980; Yanico, 1982). These associations appear to be interculturally consistent (Runge, Frey, Gollwitzer, Helmreich, & Spence, 1981; Williams & Best, 1990) and stable over time (Bergen & Williams, 1991; Spence & Buckner, 2000).

Career and career success

Whereas career denotes individual trajectories through any social system (Banks et al., 1992), career success refers more narrowly to the degree of the accumulated positive work and psychological outcomes resulting from one's work experiences (Seibert & Kraimer, 2001). Basically, researchers distinguish between objective and subjective career success (Hughes, 1958). Objective career success is defined as extrinsic variable observable by others as well (Ng et al., 2005) and consequently operationalized by salary, number of promotions, or span of supervision (Judge, Cable, Bourdeau, & Bretz, 1995). Subjective career success addresses intrinsic outcomes like career satisfaction, or other subjective judgements (Burke, 2001). In a recent meta-study both constructs appear empirically positively related yet conceptually distinct (Ng et al., 2005).

The importance of sex and gender for various aspects of careers is well documented. By and large, women come off badly in career success terms (Phillips & Imhoff, 1997: 45f.) although female success stories are easily found in the literature (see e. g. White, Cox, & Cooper, 1992). Especially in terms of objective career success, despite some positive developments only partial progress has been made since Fuchs' conclusion nearly four decades ago that the "fact that men earn more than women is one of the best established and least satisfactorily explained aspects of American labor market behavior" (Fuchs, 1971: 9). Women still earn less (OECD, 2007) even when controlling for age, education, experience, and performance (Cox & Harquail, 1991) as well as for part-time employment, function, or parental leaves (Eagly & Carley, 2007). Additionally, span of control is smaller (Schneer & Reitman, 1995) and advancement is

slower (Cohen & Gutek, 1991; Jagacinski, 1987; Morgan, Schor, & Martin, 1993). However, there is no direct relationship between gender and satisfaction (Lefkowitz, 1994; Schneer & Reitman, 1994).

Applying Bourdieu

Bourdieu's reflexive and critical approach (see e. g. Bourdieu, 1977; 1986; 1990a) has potential to contribute to this issue in a threefold manner (Özbilgin & Tatli, 2005: 855). First, it allows for a multilevel research agenda which is necessary to understand the dynamics of gender inequality. Second, it offers an epistemological and methodological framework which accounts for reflexivity inheritant to gender issues. Third, it overcomes the dualities between structure and agency as well as objectivism and subjectivism, facilitating an analysis of power structures without making accusations.

This sounds paradoxical, for Bourdieu's own contribution to gender theory, the concept of masculine domination (Bourdieu, 1976; 1997; 2005), which draws on his ethnographic data on the Berbers of Kabylia and on his analyses of Virginia Woolfs (1927) novel "To the lighthouse", is probably his most criticized work (and in particular, his solution: love, see Hull, 2001). However, the mere fact that not men and women but "relations as realizations of historical acting" (Bourdieu, 1996: 160) are the point of departure for his research, makes it possible to focus the individual construction of society and their actions together with the collective construction of the individual by the society simultaneously. Three termini are inevitably important for this: field, habitus, and capital, which refer to the macro-, meso-, and microlevel of consideration (Özbilgin et al., 2005: 861).

Field, habitus, and capital

Fields as arenas of production, circulation, and appropriation of goods, services, knowledge or status (Swartz, 1997: 117) as well as battlefields for hegemony over them (Papilloud, 2003) may be conceived as a structure of power relations (ibidem: 63) between established and heretic agents. In this respect, Bourdieu stresses the notion of "paradox of doxa", which produces and justifies men's domination over women via symbolic violence. However, since men and women only exist as agents, they are "acting in

the field under consideration by the fact that they possess the necessary properties to be effective" (Bourdieu & Wacquant, 1992: 107) in order to follow the field's *illusio*, which denotes the beliefs in the truthfulness of the appearance of social fields. This does not at all imply that agents are neither responsible for their actions, nor that they are determined by them in any way, but the relations resulting from them build up the field, which in turn enable or restrict their actions.

These actions rely upon habitus. It is responsible for the practices resulting of a set of dispositions (Bourdieu, 1990b: 6), which are themselves generative principles of distinct and distinctive practices (Bourdieu, 1998: 8). The habitus has a corporal dimension, being embodied history, the active presence of the whole past of which it is the product (Bourdieu, 1990b). Although primary socialization is of great importance, the development of habitus cannot be restricted to early childhood. It is continually adjusted to the current context and constantly reinforced or modified by further experience, i.e. by positive and negative feedback during a whole life. Consequently, neither free will nor determination completely prevails: habitus and field are linked in a circular relationship. Involvement in a field shapes the habitus which, in turn, shapes the actions that reproduce the field (Crossley, 2001). Habitus is therefore both a product of a social field's structure (*opus operatum*) and a main force of (re-) structuring these fields (*modus operandi*) (Bourdieu, 1992: 281), leading in particular to a gendered and gendering habitus (for different realizations of this idea, see Bock-Rosenthal, 1990; Engler & Friebertshäuser, 1992; Krais, 1993; Schlüter, 1986).

It is important to notice that habitus is associated with the willingness to gain hegemony over the capital structure of the field: hence, the concept of habitus coincides with the willingness to strive within a field. In turn, it can partly be perceived as incorporated capital. Bourdieu differentiates between three basic types of capital: economic, social, and cultural capital (Bourdieu, 1986). A fourth type of capital, symbolic capital, is closely related to the respective fields (Iellatchitch, Mayrhofer, & Meyer, 2003). The rules of a particular social field specify which combination of the three basic forms of capital will be authorized as symbolic capital, thus becoming socially recognized as legitimate.

Bourdieu most likely would not use the term career but trajectory in order to describe one's movements across space and time in and between organizations, which he would compare to a game (like e.g. in Bourdieu et al., 1992: 98ff.). However, careers can be reconstructed as games unfolding within career fields (Iellatchitch et al., 2003) based on career habitus (Iellatchitch, Mayrhofer, & Meyer, 2005). This career habitus enables agents to act intentionally without intention within the career field, developing a sense for, acting upon and trying to change the rules of the game. In contrast to general habitus, career habitus is developed in the course of one's trajectory.

Gendered and gendering habitus as part of this career habitus is one important aspect of the picture. Gender arrangements as realizations of what appears normal, natural, and ineluctable leads to the development of male and female (career) habitus (Bourdieu, 1997: 159). Both emerged from and contributed to the incorporation of social structures, which has a historical dimension. Hence, the way the concept of career emerged influences contemporary career habitus (and gender as part of it), and this has consequences for career success.

Hypotheses

Capital, habitus, and field are historical yet present determinants for practice of agents, partly embodied and mostly subconscious. Therefore, it is important to regard the history of careers and the way the sexes fit into this concept in order to shed light on the gender issues embedded. Consequently, the concept of career (and career success) has to be analyzed historically.

In the course of the industrial revolution and the development of capitalistic production, two spheres of production emerged (Beck, 1983; Beck-Gernsheim, 1984; Durkheim, [1893] 2008). On the one hand, a private (reproductive) sphere emerged, which spans, among others, private life, and family. On the other hand, a public (productive) sphere developed, including work, and career. Each sphere was associated with one sex group exclusively, stereotyping their members with the needs to succeed there (Strunk, Hermann, & Praschak, 2005: 215). Consequently, housework and child caring tend not to be counted as

work (Marshall, 1996: 281), in stark contrast to professional occupation. Additionally, each sphere was associated with a certain categorization. The public sphere was attributed with "rationality", indicating that keywords like achievement, efficiency, and activity count, blending instrumentality with males engaged within this sphere. This leaves "emotionality" for women within the private sphere, focusing on sensuality, affectivity, and passivity. Trajectories, being part of the public sphere, thus have a rational notion, and both the concept of career as well as career success are historically masculine both in its operationalizations (i. e., "getting more", "getting higher") as well as the realizations thereof. As a consequence, being male and making career within a career field go well together, both conceptually and empirically, and based on a career habitus that values instrumental dispositions due to historical developments. While the effect of this benefit for men might not show immediately, being female still represents a sort of "misfit" in the career field, the effect of which accumulates over time to become a significant disadvantage after several career years (see also Strunk et al., 2005).

H1: Males achieve a higher objective career success over time than females.

But "being male" is then restricted to a certain kind of masculinity. All serious games, including the career game, rely on the "principle of isotimy" (Bourdieu, 1990b: 101). This means that the *illusio* of the career field builds upon the notion of equivalence in honor, which discriminates against women as well as non-typical men, for the field's establishment is built by "real" (i. e. instrumental) men.

H2: Among men, the masculine type achieves a higher objective career success over time than all other types.

As far as female heretics are concerned, one might concede that apart from masculine typed men, masculine-typed women would have the second best cards for gaining hegemony over the field. However, in career field terms we suggest that in contrast to Bourdieu, who states that women simply avoid the most valued games like politics, business, science etc. (Bourdieu et al., 1992) or only love men who have power (while men love power, Bourdieu, 1997: 201) and thus reduce themselves to spectators of the game, androgynous women prevail. This "blending of agency with communion" (Eagly et al., 2007: 163)

enables female agents to play according to the rules of the game encoded in the career habitus, but also to avoid resistance due to gender-atypical behavior. Additionally, this stands in line with studies (see Bem, 1977; Spence, Helmreich, & Stapp, 1975; Spence & Helmreich, 1978) showing that androgynous individuals tend to be more socially effective than those who are sex typed.

H3: Among women, the androgynous type achieves a higher objective career success over time than all other types.

METHODS

Sample and data collection

The analyses draw upon two samples of business school graduates from a major European university who graduated around 1990 and 2000. The 1990 cohort consists of 199 persons (39% women, mean age 44 years \pm 3.4). The 2000 cohort comprises 426 persons (48% women, mean age 35 years \pm 3.5)¹. In both cohorts, the women are on average one year younger than the men. Concerning age and gender proportions, both cohorts are representative for the respective graduates of the whole university.

The data collection was rather time-consuming for the participants, so it was split into two phases for all cohorts. As the project started in 2000, different approaches were necessary for the 1990 as opposed to the 2000 cohort. Both cohorts were sent a questionnaire containing psychometric scales about career aspiration, career tactics, personality and job-related personality as well as a detailed investigation of sociodemographic data concerning the upbringing, e.g. urban versus rural environment, parents' education and occupation, leisure activities during childhood and youth. The response rate for the 2000 cohort was close to 20%. For the 1990 cohort, sample size was fixed before and not all graduates' addresses were available, so a response rate cannot be reported here.

The actual career survey was conducted separately. For the 1990 cohort it consisted of questionnaire-based face-to-face interviews, starting with a retrospective chronological tabulation of all previously held jobs since graduation which was the basis of several ratings for each year (number of subordinates, job

¹ Of these 426 persons, 72 come from a polytechnic sample of the same graduation year.

centrality, income, job satisfaction etc.) as well as additional information on each job (e.g., type of contract, amount of weekly work hours, type of organization). For the 2000 cohort, the same information was gathered with annual surveys from 2002 on. The following analyses include twelve work years for the 1990 cohort and up to seven work years for the 2000 cohort (not all panel members participated in each survey wave).

The sample for the scale analyses concerning masculinity and femininity (next section) is much larger (almost 1400 cases) and includes not only all survey participants from the university but several additional groups as well. Of this sample, 40% are female and the mean age here is 38 years (\pm 9.4).

Masculinity and femininity scale development

The most frequently used methods to derive gender roles as well as gender stereotypes are the "Adjective Check List" (Williams & Bennett, 1975), the "Sex-Role Stereotype Questionnaire" (Rosenkrantz, Vogel, Bee, Broverman, & Broverman, 1968), the "(Extended) Personal Attributes Questionnaire" (Spence, Helmreich, & Holahan, 1979), and the "Bem Sex Role Inventory" (Bem, 1974) (cf Eckes, 2004: 166). As the idea of connecting masculinity and femininity to gender and career outcomes arose after the Vi-CaPP survey, we had to make do with the items and scales contained in the ViCaPP questionnaire (see below), none of them tailored to measuring aspects of gender role orientation.

Still, we tried a theory-driven approach, taking dimensions of feminine and masculine behavior identified in the literature (Runge et al., 1981; Spence et al., 1978; Spence et al., 2000) and looking for items that corresponded to each of these dimensions. Apart from attempting to maximize face validity (which was our foremost goal), we also wanted the resulting scales to have decent consistency values and not to intercorrelate too strongly. The available items came from two scales of the German NEO-FFI (emotional stability and conscientiousness; Borkenau & Ostendorf, 1993), the Bochumer Inventory of job-related personality (leadership motivation, achievement orientation, team orientation, flexibility etc.; Hossiep & Paschen, 1998), a self-monitoring scale (Schiefle, 1990; Snyder, 1974) as well as five scales measuring

career-oriented political behavior and four scales measuring career aspirations (both developed for Vi-CaPP, e.g. Schiffinger & Strunk, 2003).

The elements of positive feminine personality traits identified in Runge et al. (1981) are (each followed by the number of items measuring this aspect and one sample item from the ViCaPP questionnaire; (-) stands for a reverse-coded item):

- Emotional (3): "I am considered to be a reserved person." (-)
- Devotes self to others (4): "Being able to pursue my activities without having to adjust to others is important to me." (-)
- Gentle (2): "If necessary, I overcome resistance against my plans by a trial of strength." (-)
- *Helpful (3):* "My colleagues see me as a lone warrior." (-)
- Kind (2): "I strictly limit my relations to co-workers to a professional level." (-)
- Aware of feelings (2): "I find it difficult to criticize others."
- *Understanding (1):* "I don't like making decisions that trammel others."
- Warm (4): "It takes me a while to make friends." (-)

The elements of positive masculine behavior identified in Runge et al. 1981 are:

- Independent (2): "I consistently avoid cliques and old boys networks."
- Active (3): "When in company, I leave it to others to tell jokes and stories." (-)
- Decisive (2): "I like being in charge of important decisions."
- Never gives up (2): "I am too easily discouraged and prone to giving up when something goes wrong." (-)
- Self-confident (3): "During meetings I often assume chairmanship even without being a formal leader."
- Feels superior (3): "I am a role model to others."
- Stands up under pressure (2): "I am not easily worried."

It might be interesting to note that finding items for the femininity dimensions in these "career-related" scales was notedly harder (and mostly resulted in using reverse-coded items) than finding masculinity items (which may account as first indication for the masculinity already implied to career issues). Consequently, it is not too surprising that despite a higher number of items, the Cronbach alpha for the femininity scale (21 items) is only .67 compared to .77 for the masculinity scale (17 items). Despite being rather low, both values are still above the consistency values reported for the original scales (Runge et al., 1981: 153). We are fully aware that the item face validity for some aspects is problematic owing to

the limited selection of appropriate items. It is also apparent that the content of some items clearly overlaps, especially for the femininity scale, but this is in accordance with the original concept where both constructs are reported as being unidimensional (Runge et al., 1981: 148). Scale intercorrelation is a moderate .23, consistent with the assumption of two largely independent constructs. The mean differences between men and women are qualitatively plausible and in agreement with the theory (Runge et al., 1981: 154), but not too pronounced. On a theoretical range from 1 to 6, the means were 3.82 (women) vs. 3.7 (men) for femininity, and 4.08 (women) vs. 4.33 (men) for masculinity.

An explorative factor analysis (ML extraction) with a forced two-factor solution provides some additional support for item allocation and scale independence: for a Varimax-rotated solution only two items per scale (9.5% for femininity and 11.8% for masculinity) had higher loadings on the "wrong" factor. A confirmatory factor analysis on the same dataset (n = 1399) yields mixed results. The chi-square statistic clearly rejects the model (chi-square = 6419.9, df = 664), but this is probably a result of the rather large sample size, too. RMSEA (.08) and SRMR (.09) values indicate an acceptable fit, while NNFI (.57) and CFI (.59) clearly fall short of desirable standards (Schermelleh-Engel, Mososbrugger, & Müller, 2003: 52).

Other Measures

Gender role type was assigned by a median split (following Spence et al., 1979) of the abovementioned positive femininity (fem) and masculinity (mas) scales (seperately for each cohort), with four resulting combinations: undifferentiated (low fem, low mas), feminine (high fem, low mas), masculine (low fem, high mas), and androgynous (high fem, high mas).

Income refers to the gross yearly income as reported by the participants. Self-reported measures are always prone to biases, especially single-item measures. Yet, Podsakoff et al. (1986: 532f.) find that variables which can be reality checked are usually only marginally distorted. Judge et al. (1995) report a mere 1% difference between self- and archival reports of salary in a sample of 1,338 executives.

Methods

Due to the longitudinal nature of our data, we analyzed the proposed effects of time, gender, and gender role type on income and career satisfaction with the mixed linear models procedure (e.g., McCulloch & Searle, 2001) incorporated in SPSS, including work years not only as a fixed effect but also as an autoregressive term (AR1) in all models. While the purpose of this method and interpretation of the results are similar to general linear models and/or linear regression, it can handle data correlation stemming from repeated measures per case even for unbalanced longitudinal data (e.g., Jennrich & Schluchter, 1986: 806) and is therefore well suited to our data structure.

As the hypotheses concerning objective career success assume that the effects of gender and gender role type (GRT) develop over time, the fitted models not only include gender, GRT, and work year as fixed main effects, but the gender and GRT x work year interactions as well. In addition, an explorative gender x GRT and gender x GRT x work year interaction term was added, too. For income, outliers were filtered out for each cohort and each work year, separately for women and men, before conducting the analyses.

RESULTS

Table 1 shows the results for income for both cohorts (parameter estimates in Euro with standard error and fixed effect F and p values). Concerning parameter estimates for gender and GRT, male gender and androgynous GRT were the reference categories for which no extra parameters were computed, so to shorten the output only the other categories are reported in the table.

Insert table 1 about here

The results show that for income both gender and GRT have a significant effect on income, but only over time. For gender, these results concur with prior studies (e.g., Strunk et al., 2005), but GRT apparently is a significant predictor for income over time as well. Not surprisingly, income rises significantly with career experience, too. On a 10% level, gender and GRT even interact over time, suggesting that the four gender role types have a different effect on income, depending on whether the person is female or male. Like in regression or general linear models, the estimated value for the dependent variable can be obtained by adding the respective parameter estimates to the constant term. To better illustrate the effects of gender and GRT, Figure 2 shows the predicted income values for both cohorts. Including all combinations would result in a rather confusing chart, so only the GRT with most and least income for both women and men are shown here.

Insert Figure 2 about here

The charts show that both gender and GRT have an effect on income that develops over time, but that different GRT are most and least successful in terms of income for women and men (and between cohorts, too). In the 1990 cohort, masculine men and androgynous women had the highest income, apparently in accordance with hypotheses 2 and 3, while a feminine GRT hampered income for both women and men. In the 2000 cohort, the most "successful" GRT are reversed (masculine women, androgynous men), and while being feminine still penalizes men most, it is indifferent (and not feminine) women that

earn the least. In addition, the results suggest that while in the 1990 cohort the most successful women's GRT has more income than the least successful men's GRT, in the 2000 cohort even the most successful women's GRT just barely closes in on the least successful men's GRT.

So while hypothesis 1 is supported by the data for both cohorts, hypotheses 2 and 3 are only partially supported. Hypothesis 2 is not even supported for the 1990 cohort, as contrasting the masculine x work year parameter estimate for the men with their "second best" GRT (androgynous) gives a p value of .13. Hypothesis 3 is supported on a 10% level for the 1990 cohort: contrasting the androgynous x work year parameter estimate with the "second best" among the women (masculine) yields a p value of .09. For the 2000 cohort, the results contradict the hypotheses qualitatively, the only sustained result for both cohorts being that GRT has a significant effect over time on income, just as gender does.

The predictors in the model explain a fair amount of variance in income. There are no R square values for mixed linear models, but an alternative with similar properties and interpretation called marginal R square (e.g., Zheng, 2000: 1269). The marginal R square values for the two models are .36 for the 1990 cohort and .37 for the 2000 cohort.

Including some other basic predictors concerning gender and career does not manifestly change the results. Controlling for marital status (single, married, in partnership with/without living together) and number of children (as main effects and in interaction with work year, gender, and GRT) makes gender (and its interaction with number of children) a significant predictor of income right away (still, gender also remains a significant predictor over time) for the 2000 cohort. GRT loses importance as a main effect in this model but significantly interacts with gender over time at the 1% level. Concerning career satisfaction, there are no more significant predictors other than gender *x* GRT over time. For the 1990 cohort, no sound results can be reported as there are only 31 cases with information on children and marital status.

Omitting work years without employment (e.g., maternity leave) from the analyses doesn't change the significant predictors for the 2000 cohort; for the 1990 cohort, the gender *x* GRT *x* work year term is no longer significant for income prediction. In the enhanced models including marital status and number of children, GRT gains importance for income in the 2000 cohort compared to the models including phases of unemployment. For career satisfaction, results remain the same. Again, no useful comparison with the 1990 cohort can be made here.

Limitations and caveats

The present study obviously has some shortcomings, most of which have already briefly been mentioned: a rather specific sample of highly educated business school graduates, the difference in survey design between the two cohorts (real-time vs. retrospective), and the validity and scale property issues associated with the attempt to construct scales for measuring gender role orientation with items from other and basically unrelated questionnaires. Another point could be made here concerning the idea of gender role orientation itself: is the concept devised by Spence and Helmreich (1978) which we tried to reproduce still up to date or does it (already) lack thematic relevance? As mentioned above, it is important to notice, however, that gender role type appears to be a stable concept, both culturally and temporally (Eckes, 2004). Indeed, this inertia puts it theoretically close to the notion of habitus.

The term "androgynous" appears old fashioned and theoretically overcome (Bock, 2004: 101), already replaced by terms like transgender (see, e.g. Kirk & Belovics, 2008) and transgression (see e. g. Smith, Smith Powers, & Suarez, 2005), cross dressing (see e. g. Penkwitt & Pusse, 1999; Guthey, 2001), gender bending (see e. g. Sweeney, 2006) or gender crossing (see e. g. Penaloza, 1994). The reasons behind is the alleged masculine notion underneath the nomology, and the perpetuation of the traditional "masculine" and "feminine" concepts in the union of both arising. However, we decided to keep the term and to use it in an epistemological opened manner in order to connect with the classical theory of gender role

types and to work with the empirical data deriving from the idea – just like Bourdieu would most likely do.

DISCUSSION

Related to the key issues serving as the point of departure for this study, i.e. the need for a more refined conceptualization of gender and the explicit inclusion of the temporal dimension into the analysis, the results sustain the significance of both issues.

This analysis again confirms that gender is a relevant variable which is hardly surprising given the ample evidence in previous literature. However, using a more differentiated concept of gender beyond the male/female dichotomy, in our case: gender role types, adds to the depth of the analysis. Both elements of the overall conceptualization, i.e. gender and gender role types, do play an important role in explaining objective career success over time. This has conceptual as well as empirical consequences. At the conceptual level, this underscores the efforts developing a differentiated view on gender beyond the mere man/woman dichotomy. At the empirical level, the results call for the inclusion of gender-related variables that go beyond this dichotomy in order to get more fine-grained results when using gender as a dependent/independent variable or as a control variable in career research.

Related to the temporal dimension, the results show that cross-sectional snapshot analyses have clear limitations. In terms of changes in the course of individual career trajectories, the results show that depending on the career year, the relative differences between different gender role types are varying. This points towards the importance of controlling for years of professional experience since at least in the relationship between gender and income this seems to make a difference.

In terms of changes between different age cohorts, the results which indicate that changes do occur as well as conceptualizing gender role orientation as part of individuals' career habitus widen the perspective considerably by directing one's attention to the broader environment and the embeddedness of careers in the cultural and institutional context. Habitus as well as capital are not given entities that have a

value regardless of the field they are embedded in, but receive their specific significance from the properties of the field. For example, while one field might regard social capital such as access to social networks as valuable symbolic capital which is crucial for achieving prominent positions in this field, other fields might more rely on formal certificates. Likewise, the required habitus for gaining access to important positions can differ between fields or change within the same field. For example, due to factors such as mass media or the importance of web-based communication via blogs or social network, the habitus of a successful politician has changed when compared to the situation in the pre-mass media era where good looks, charismatic appeal or the appearance of being web-literate were of little or no importance.

Over the past four decades, gender has been a major theme when looking at the context of work careers (Mayrhofer, Meyer, & Steyrer, 2007) as well as at the level of society, addressing issues such as the relationship between men and women, the role of women in society, or the make-up of partnerships and families. Arguably, the effects of these developments constitute one of the major changes that industrialized countries have witnessed over the past decades. Among others, this also has partly changed the views of what it takes to be successful in your job. The middle-aged white male as the prototype for occupational success still exists. However, it has been supplemented by other views, coming from the diversity discussion, from the call to men to transcend the classical male role of being the sole breadwinner and to include more 'feminine and soft' characteristics as reflected in numerous popular books about reconciling the sexes, from the increasing availability of successful female role models in business and in politics or from the calls for alternative ways of doing business in terms of sustainability requiring different competencies beyond the 'masculine and hard' approach of 'higher-faster-farther'. In addition, especially for women the focus of part of the discussion has shifted from 'being the same as men' to 'we're different from men – and this is positive'. This has underlined a new importance of the feminine dimension within one's overall gender role orientation which is partly reflected in the results.

In terms of gender role orientations and their relationship to career success in different cohorts of individuals entering the labor market 10 years apart, these developments lead to two major assumptions.

First, for both men and women, displaying a clear masculine element in one's gender role orientation as part of the individual habitus is still rewarded by the career fields business school graduates are in. Despite the developments pointed out, doing business is still heavily influenced by 'masculine' values and patterns such as being active, self-confident and risk-taking. Second, our results might reflect the "crisis of men" (Houellebecq, 2006) insofar as in the 2000 cohort, the most successful male agents are not those with a decidedly masculine gender role type but those displaying "female" qualities as well. After all, habitus is inert – but apparently not immutable.

REFERENCES

- Abele, A. E. 1994. *Karriereorientierungen angehender Akademikerinnen und Akademiker*. Bielefeld: Kleine Verlag.
- Astin, H. S. 1984. The Meaning of work in women's lives: A socio-psychological model of career choice and work behavior. *The Counselling Psychologist*, 12(4): 117-126.
- Bakan, D. 1966. *The duality of Human Existence*. Chicago, Ill.: Rand McNally.
- Banks, M., Bates, I., Breakwell, G., Bynner, J., Emler, N., Jamieson, L., & Roberts, K. 1992. *Careers and identities*. Philadelphia: Open University Press.
- Beck-Gernsheim, E. 1984. Individualisierungstheorien: Veränderungen des Lebenslaufs in der Moderne.

 In H. Keupp (Ed.), *Zugänge zum Subjekt. Perspektiven einer reflexiven Sozialpsychologie*:

 125-146. Frankfurt a. Main: Suhrkamp.
- Beck, U. 1983. Jenseits von Stand und Klasse? Soziale Ungleichheiten, gesellschaftliche Individualisierungsprozesse und die Entstehung neuer sozialer Formationen und Identitäten. In R. Kreckel (Ed.), Soziale Ungleichheiten, Soziale Welt: 35-47. Göttingen: Schwarz.
- Bem, S. L. 1974. The Measurement of Psychological Androgyny. *Journal of Consulting and Clinical Psychology*, 42: 155-162.
- Bem, S. L. 1977. On the utility of alternate procedures for assessing psychological androgyny. *Journal of Consulting and Clinical Psychology*, 45: 196-205.
- Bem, S. L. 1993. *The Lenses of Gender*. New Haven: Yale University.
- Bergen, D. J., & Williams, J. E. 1991. Sex Stereotypes in the United States Revisited: 1972-1988. *Sex Roles*(24): 413-423.
- Block, J. H. 1978. Conceptions of sex roles: some cross-cultural and longitudinal perspectives. *American Psychologist*, 28: 512-526.
- Bock-Rosenthal, E. 1990. Strukturelle Diskriminierung nur ein statistisches Phänomen? In E. Bock-Rosenthal (Ed.), *Frauenförderung in der Praxis. Frauenbeauftragte berichten*: 11-54. Frank-

- furt a. Main/New York: Campus.
- Bock, U. 2004. Androgynie: Von Einheit und Vollkommenheit zu Vielfalt und Differenz. In R. Becker,
 & B. Kortendiek (Eds.), *Handbuch Frauen- und Geschlechterforschung. Theorie, Methoden*, *Empirie*: 99-103. Wiesbaden: VS Verlag für Sozialwissenschaften.
- Borkenau, P., & Ostendorf, F. 1993. NEO-Fünf-Faktoren Inventar (NEO-FFI) nach Costa und McCrae. Handanweisung. Göttingen: Hogreve Verlag für Psychologie.
- Bornmann, L., & Enders, J. 2004. Social origin and gender of doctoral degree holders. Impact of particularistic attributes in access to and in later career attainment after achieving the doctoral degree in Germany. *Scientometrics*, 61(1): 19-41.
- Bourdieu, P. 1976. Les modes de domination. *Actes de la Recherche en Sciences Sociales*, 2(2): 122-132.
- Bourdieu, P. 1977. *Outline of a Theory of Practice*. Cambridge, MA: University Press.
- Bourdieu, P. 1986. The Forms of Capital. In J. G. Richardson (Ed.), *Handbook of Theory and Research* for the Sociology of Education: 241-258. New York: Greenwood Press.
- Bourdieu, P. 1990a. *In Other Words. Essays Towards a Reflexive Sociology*. Cambridge, UK: Blackwell.
- Bourdieu, P. 1990b. *The Logic of Practice*. Stanford: Stanford University Press.
- Bourdieu, P. 1992. *Die feinen Unterschiede Kritik der gesellschaftlichen Urteilskraft* (5 ed.). Frankfurt.
- Bourdieu, P. 1996. Die Ziele der reflexiven Soziologie. In P. Bourdieu, & L. J. D. Wacquant (Eds.), *Reflexive Anthropologie*. Frankfurt a. Main: Suhrkamp.
- Bourdieu, P. 1997. Die männliche Herrschaft. In I. Dölling, & B. Krais (Eds.), *Ein alltägliches Spiel. Geschlechterkonstruktion in der sozialen Praxis*: 157-217. Frankfurt a. Main: Suhrkamp.
- Bourdieu, P. 1998. *Practical Reason: On the Theory of Action*. Cambridge: Polity Press.
- Bourdieu, P. 2005. *Die männliche Herrschaft*. Frankfurt a. Main: Suhrkamp.

- Bourdieu, P., & Wacquant, L. J. D. 1992. *An Invitation to Reflexive Sociology*. Chicago: University of Chicago Press.
- Burke, R. J. 2001. Managerial women's career experiences, satisfaction and well-being: A five country study. *Cross Cultural Management*, 8: 117-133.
- Clarey, J. H., & Sanford, A. 1982. Female career preference and androgyny. *The Vocational Guidance Ouarterly*, 30(3): 258-264.
- Cleveland, J. N., Stockdale, M., & Murphy, K. R. 2000. *Women and Men in Organizations*. Mahwah, New Jersey- London: Lawrence Erlbaum Associates.
- Cohen, A., & Gutek, B. A. 1991. Sex differences in the career experiences of members of two APA division. *American Psychologist*, 46: 1292-1298.
- Correll, S. 2001. Gender and the Career Choice Process: The Rolfe of Biased Self-Assessments. *American Journal of Sociology*, 106(6): 1691-1730.
- Cox, T. H., & Harquail, C. V. 1991. Career paths and career success in the early career stages of male and female MBAs. *Journal of Vocational Behavior*, 39: 54-75.
- Crossley, N. 2001. The phenomenological habitus and its construction. *Theory and Society*(30): 81-120.
- Durkheim, E. 2008. Über soziale Arbeitsteilung. Studie über die Organisation höherer Gesellschaften.

 Arbeitsteilung, Solidarität und Moral. Eine werkgeschichtliche und systematische Einführung in die 'Arbeitsteilung'. Frankfurt a. Main: Suhrkamp.
- Eagly, A. H., & Carley, L. L. 2007. *Through the labyrinth: The truth about how women become leaders*. Boston: Harvard University Business School Press.
- Eckes, T. 2004. Geschlechterstereotype: Von Rollen, Identitäten und Vorurteilen. In R. Becker, & B. Kortendiek (Eds.), *Handbuch Frauen- und Geschlechterforschung. Theorie, Methoden, Empirie*: 165-177. Wiesbaden: VS Verlag für Sozialwissenschaften.
- Engler, S., & Friebertshäuser, B. 1992. Die Macht des Dominanten. In A. Wetterer (Ed.), *Profession und Geschlecht. Über die Marginalität von Frauen in hochqualifizierten Berufen*: 101-120.

- Frankuft a. Main/New York: Campus.
- Farmer, H. S. 1985. Model of career and achievement motivation for women and men. *Journal of Counseling Psychology*, 32(3): 363-390.
- Fuchs, V. R. 1971. Differences in hourly earnings between men and women. *Monthly Labor Review*, 94(5): 9-16.
- Guthey, E. 2001. Ted Turner's corporate cross-dressing and the shifting images of American business leadership. *Enterprise & Society*, 2(1): 111-142.
- Harren, V. A., Kass, R. A., Tinsley, H. E. A., & Moreland, J. R. 1979. Influence of gender, sex-role attitudes, and cognitive complexity on gender-dominat career choices. *Journal of Counseling Psychology*, 26(3): 227-234.
- Hermann, A. 2004. Karrieremuster im Management. Pierre Bourdieus Sozialtheorie als Ausgangspunt für eine genderspezifische Betrachtung. Wiesbaden: Deutscher Universitäts-Verlag.
- Hossiep, R., & Paschen, M. 1998. *Das Bochumer Inventar zur berufsbezogenen Persönlichkeitsbeschreibung (BIP). Handanweisung*. Göttingen: Hogrefe Verlag für Psychologie.
- Houellebecq, M. 2006. Die Ausweitung der Kampfzone. Reinbeck bei Hamburg: Rowohlt.
- Hughes, E. C. 1958. *Men and Their Work*. Glencoe, Ill.: Free.
- Hull, K. E. 2001. Book Review: Masculine Domination. Social Forces, 81(1): 351-352.
- Iellatchitch, A., Mayrhofer, W., & Meyer, M. 2003. Career fields: A small step towards a grand career theory? *International Journal of Human Resource Management*, 14(5): 728-750.
- Iellatchitch, A., Mayrhofer, W., & Meyer, M. 2005. Career Habitus Revisited. Complicated and Incomprehensible Answers to Questions Nobody Asked?, *EGOS*. Berlin.
- Jagacinski, C. M. 1987. Androgyny in a male dominated field: the relationship of sex-typed traits to performance and satisfaction in engineering. *Sex Roles*, 17: 529-547.
- Jennrich, R. I., & Schluchter, M. D. 1986. Unbalanced repeated-measures models with structured covariance matrices. *Biometrics*, 42(4): 805-820.

- Judge, T. A., Cable, D. M., Bourdeau, J. W., & Bretz, R. D. 1995. An empirical investigation of the predictors of executive career success. *Personnel Psychology*, 48: 485-519.
- Kirk, J., & Belovics, R. 2008. Understanding and counseling transgender clients. *Journal of Employment Counseling*, 45(1): 29-44.
- Krais, B. 1993. Geschlechterverhältnis und symbolische Gewalt. In G. Gebauer, & C. Wulf (Eds.), *Pra- xis und Ästhetik: neue Perspektiven im Denken Pierre Bourdieus*: 208-250. Framkfurt a. Main:
 Suhrkamp.
- Lefkowitz, J. 1994. Sex-Related differences in job attitudes and dispositional variables: Now you see them... *Academy of Management Journal*, 37(2): 323-349.
- Lyness, K. S., & Thompson, D. E. 1997. Above the glass ceiling? A comparison of matched samples of female and male executives. *Journal of Applied Psychology*, 82: 359-375.
- Mallon, M., & Cohen, L. 2001. Time for a Change? Women's Accounts of the Move from Organizational Careers to Self-Employment. *British Journal of Management*, 12: 217-230.
- Marshall, J. 1996. Re-visioning career concepts: a feminist invitation. In M. B. Arthur, D. T. Hall, & B. S. Lawrence (Eds.), *Handbook of career theory.*: 275-292. Cambridge: Cambridge University Press.
- Marshall, S. J., & Wijting, J. P. 1980. Relationships of achievement motivation and sex-role identy to college women's career orientation. *Journal of Vocational Behavior*, 16: 299-311.
- Mayrhofer, W., Iellatchitch, A., Meyer, M., Steyrer, J., Schiffinger, M., & Strunk, G. 2004. Going beyond the individual. Some potential contributions from a career field and habitus perspective for global career research and practice. *Journal of Management Development*, 23(9): 870-884.
- Mayrhofer, W., Meyer, M., & Steyrer, J. 2007. Contextual Issues in the Study of Careers. In H. P. Gunz, & M. A. Peiperl (Eds.), *Handbook of Career Studies*: 215-240. Thousend Oaks, CA: Sage.
- McCulloch, C. E., & Searle, S. R. 2001. *Generalized linar and mixed models*. New York, NY: Wiley & Sons.

- Melamed, T. 1995. Career Success: The Moderating Effect of Gender. *Journal of Vocational Behavior*, 47: 35-60.
- Morgan, S., Schor, S. M., & Martin, L. R. 1993. Gender differences in career paths in banking. *Career Development Quarterly*, 41: 375-382.
- Ng, T. W. H., Eby, L. T., Sorensen, K. L., & Feldman, D. C. 2005. Predictors of Objective and Subjective Career Success: A Meta-Analysis. *Personnel Psychology*, 58: 367-408.
- OECD. 2007. Organisation for Economic Co-operation and Development (OECD) Employment outlook 2007 (statistical annex).
- Özbilgin, M., & Tatli, A. 2005. Understanding Bourdieu's Contribution to Organization and Management Studies. *Academy of Management Review*, 30(4): 855-869.
- Papilloud, C. 2003. *Bourdieu lesen. Einführung in eine Soziologie des Unterschieds*. Bielefeld: Transcript.
- Parsons, T., & Bales, R. 1955. Family socialization and interaction process. Glencoa, Ill.: Free Press.
- Penaloza, L. 1994. Crossing boundaries/drawing lines: A look at the nature of gender boundaries and their impact on marketing research. *International Journal of Research in Marketing*, 11(4): 359-381.
- Penkwitt, M., & Pusse, T.-K. 1999. Cross-dressing und Maskerade. Einleitung zu Crossdressing und Maskerade. *Freiburger FrauenStudien*, 5(1): 9-15.
- Phillips, S., D., & Imhoff, A. R. 1997. Women and Career Development: A Decade of Research. *Annual Review of Psychology*, 48: 31-59.
- Podsakoff, P. M., & Organ, D. W. 1986. Self-reports in organizational research: Problems and prospectors. *Journal of Management*, 12(4): 531-544.
- Powell, G. N., Butterfield, A., & Parent, J. D. 2002. Gender and managerial stereotypes: Have the times changed? *Journal of Management*, 28: 177-193.
- Powell, G. N., & Mainiero, L. A. 1992. Cross-Currents in the River of Time: Conceptualizing the Com-

- plexities of Women's Careers. Journal of Management, 18(2): 215-237.
- Reimers, T. 1994. *Die Natur des Geschlechterverhältnisses: biologische Grundlagen und soziale Folgen sexueller Unterschiede*. Frankfurt a. Main/New York: Campus.
- Rosenkrantz, P., Vogel, S., Bee, H., Broverman, I., & Broverman, D. M. 1968. Sex-role Stereotypes and Self-concepts in College Students. *Journal of Consulting and Clinical Psychology*, 32: 287-295.
- Runge, T. E., Frey, D., Gollwitzer, P. M., Helmreich, R. L., & Spence, J. T. 1981. Masculine (instrumental) and feminine (expressive) traits. A comparison between students in the United States and West Germany. *Journal of Cross-Cultural Psychology*, 12(2): 142-162.
- Schermelleh-Engel, K., Mososbrugger, H., & Müller, H. 2003. Evaluating the fit of structural equation models: test of significance and descriptive goodness-of-fit measures. *Methods of Psychological Research Online*, 8(2): 23-74.
- Schiefle, U. 1990. *Einstellung, Selbstkonsistenz und Verhalten*. Göttingen: Hogrefe Verlag für Psychologie.
- Schiffinger, M., & Strunk, G. 2003. Zur Messung von Karrieretaktiken und ihrer Zusammenhänge mit Karriereerfolg und Karriereaspirationen. In R. Hitzler, & M. Pfadenhauer (Eds.), *Karrierepolitik.***Beiträge zur Rekonstruktion erfolgsorientierten Handelns: 295-313. Opladen: Leske & Budrich.
- Schlüter, A. 1986. "Wenn zwei das Gleiche tun, ist das noch lange nicht dasselbe" Diskriminierungen von Frauen in der Wissenschaft. In A. Schlüter, & A. Kuhn (Eds.), *Lila Schwarzbuch. Zur Diskriminierung von Frauen in der Wissenschaft*: 10-33. Düsseldorf: Schwann.
- Schneer, J. A., & Reitman, F. 1994. The importance of gender in the mid-career: a longitudinal study of MBAs. *Journal of Organizational Behavior*, 15(199-207).
- Schneer, J. A., & Reitman, F. 1995. The Impact of Gender as Managerial Career Unfold. *Journal of Vocational Behavior*, 47: 290-315.
- Seibert, S. E., & Kraimer, M. L. 2001. The Five-Factor Model of Personality and Career Success. Jour-

- nal of Vocational Behavior, 58(1): 1-21.
- Smith, E. S., Smith Powers, A., & Suarez, G. A. 2005. If Bill Clinton were a woman: the effectiveness of male and female politicans' account strategies following alleged transgressions. *Political Psychology*, 26(1): 115-134.
- Snyder, M. 1974. Self-monitoring of expressive behavior. *Journal of Personality and Social Psychology*, 30: 526-537.
- Spence, J. T., & Buckner, C. E. 2000. Instrumental and Expressive Traits, Trait Stereotypes, and Sexist Attitudes: What Do They Signify? *Psychology of Women Quarterly*, 24: 44-62.
- Spence, J. T., & Helmreich, R. L. 1978. *Masculinity and Feminity: Their Psychological Dimensions,*Correlates, & Antecedents. Austin, TX: University of Texas Press.
- Spence, J. T., Helmreich, R. L., & Holahan, C. K. 1979. Negative and positive components of psychological masculinity and femininity and their relationships to self-reports of neurotic and acting out behaviors. *Journal of Personality and Social Psychology*, 37: 1673-1682.
- Spence, J. T., Helmreich, R. L., & Stapp, J. 1975. Ratings of self and peers on sex role attributes and their relation to self-esteem and conceptions of masculinity and femininity. *Journal of Personality and Social Psychology*, 32: 29-39.
- Stroh, L. K., Brett, J. F., & Reilly, A. H. 1992. All the right stuff: A comparison of female and male managers' career progression. *Journal of Applied Psychology*, 77: 251-260.
- Strunk, G., Hermann, A., & Praschak, S. 2005. Eine Frau muss ein Mann sein, um Karriere zu machen. In W. Mayrhofer, M. Meyer, & J. Steyrer (Eds.), *Macht? Erfolg? Reich? Glücklich? Einfluss-faktoren auf Karrieren*: 211-242. Wien: Linde international.
- Swartz, D. 1997. *Culture and power. The sociology of Pierre Bourdieu*. Chicago: University of Chicago Press.
- Sweeney, K. 2006. Supernatural girls. *Afterimage*, 33(5): 13-17.
- Tharenou, P. 1999. Gender differences in advancing to the top. *International Journal Management*

- Reviews, 1(2): 111-132.
- White, B., Cox, C., & Cooper, C. 1992. *Women's career development: A study of high flyers*. Oxford: Blackwell.
- Williams, J. E., & Bennett, S. M. 1975. The Definition of Sex Stereotypes via the Adjective Check List. *Sex Roles*, 1: 327-337.
- Williams, J. E., & Best, D. L. 1990. *Measuring Sex Stereotypes: A Multination Study*. Newbury Park, CA: Sage.
- Williams, S. W., & MucCullers, J. C. 1983. Personal factors related to typicaleness of career and success in active professional women. *Psychology of Women Quarterly*, 7(4): 343-357.
- Yanico, B. J. 1982. Androgyny and occupational sex-stereotyping of college students. *Psychological Reports*, 50: 875-878.
- Zheng, B. 2000. Summarizing the goodness of fit of generalized linear models for longitudinal data. *Statistics in Medicine*, 19: 1265-1275.

FIGURE 1

Gender Role Types

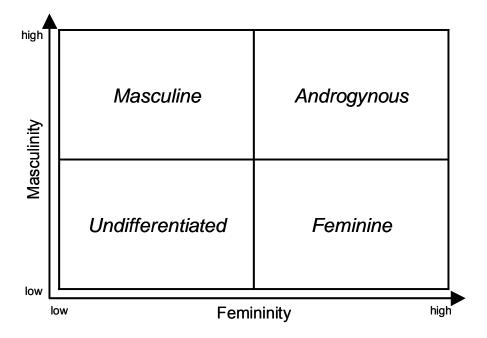


TABLE 1

Parameter estimates and significance of effects for income models

	1990 cohort (n =		F value	2000 cohort (n =		F value
	179)		of	415)		of
Predictor term	Par. estimate (s.e.)		effect (p)	Par. estimate (s.e.)		effect (p)
(Constant)	12846.3	(5890.0)	40.39	27055.5	(2558.1)	498.92
			**			**
Work year	5538.9	(515.4)	326.62	7712.0	(561.8)	331.61
			**			**
Gender: female (vs. male)	1564.7(10080.5)	.01	-4172.1	(4534.0)	1.44
<i>GRT:</i> indifferent (vs. androg.)	3839.7	(8108.3)	.19	-2022.5	(3849.0)	.14
GRT: feminine (vs. androg.)	4782.7	(9478.8)		1666.0	(4399.3)	
GRT: masculine (vs. androg.)	6882.6	(8290.6)		-3451.0	(3954.5)	
Female gender x work year	157.5	(881.4)	15.60	-3753.4	(980.0)	21.88
(wy)			**			**
GRT ind. (vs. androg.) x wy	-763.6	(708.9)	13.80	-2613.3	(848.2)	6.10
, , , ,			**			**
GRT fem. (vs. androg.) x wy	-2417.0	(831.8)		-4232.2	(1066.7)	
GRT mas. (vs. androg.) x wy	1335.2	(729.0)		-817.9	(860.2)	
Female <i>gender x GRT</i> ind.	869.8(14202.9)	.19	4886.8	(6040.6)	.68
Female gender x GRT fem.	287.7(14343.3)		-2863.1	(6411.7)	
Female gender x GRT mas.	-9017.2(15112.0)		4022.2	(6499.3)	
Female <i>gender x GRT</i> ind. <i>x</i>	-2957.0	(1250.5)	2.33 [†]	718.0	(1310.1)	2.48 †
wy						
Female gender x GRT fem. x	-2108.6	(1257.8)		3862.6	(1492.9)	
wy						
Female gender x GRT mas. x	-2849.0	(1345.5)		955.8	(1442.3)	
wy						

 $^{^{\}dagger}$: p < 0.1 **: p < 0.01

FIGURE 2

Income Development (Predicted Means) of the most and least successful GRT

