## **Jonas Asendorpf**

### Person-Environment Fit in Ghanaian Banks

The impact of sex, age, ethnical origin, personality similarity and workgroup diversity on interpersonal relations and performance

**Diploma Thesis** 

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Thesis written by Jonas Asendorpf

### Diplomarbeit

### **Person-Environment Fit in Ghanaian Banks**

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Leipzig, den 01.01.2008

### **DANKE**

### **Abstract**

The African nations are not only economically underdeveloped, but also received little attention by psychological research. Few substantial research covers interpersonal relationships' dependence on attribute configurations of dyads or workgroups, and their associations with outcomes. These relations were analyzed within a person-environment fit framework, covering the three facets Person-Supervisor Fit, Person-Workgroup Fit, and workgroup diversity in sex, age, ethnical origin and personality in a sample of three banks in Ghana. Findings indicate a highly differentiated pattern of fit effects on the outcomes leader-member exchange, relationship style with and positive affect towards the leader, perceived workgroup cohesion, follower's affective commitment, promotion, income and group performance. They could mostly not be explained with common similarity attraction or information/decision-making paradigms but rather unique historical and societal dynamics, indicating that fit effects are highly sensitive to context factors.

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"Sehr geehrte Damen und Herren, liebe Neger..."

Heinrich Lübcke (1962)

# **Introduction**

Introduction xii

The present study is a blend of three different streams of psychology – cross-cultural, organizational and social psychology. It mixes cross-cultural ingredients about the context - the country Ghana and the continent Africa - with theories about the relevance of social categories in team building processes and spices from I/O psychology – dyadic leader-member exchange and relationship quality, group performance and the inner country context of banks. All to find an answer to the overarching question: Do social categories, more precisely their similarity in dyads or their fit between an individual and his or her workgroup, affect interpersonal relationship and group outcomes such as attitudes or performance in the banking system of the transitional economy Ghana?

Much has been written on the African way of life, thought and organization, but most of this work is restricted to ethnological knowledge which does not offer a robust theoretical basis, on which a psychological study can be built. The last years saw Africa ranking highest on development aid agendas like the Millennium Development Goals announced by the United Nations because most of the African countries, especially south of the Sahara, have been left behind by the development taking place in most parts of the underdeveloped world within the last fifty years. Many explanations have been attempted, but only a small volume of elaborate research has been undertaken. Often the traditional organization of individuals in clan like micro communities with their own chief and priest and so their own judicial, legislative and executive system is blamed together with a recent history of colonialism, creating country bodies without any historical eligibility and immense ethnic rivalry within and between them. This would have led to a tradition of favoritism and corruption along former and new lines of public organization. These claims are mostly made without empirical evidence and most likely oversimplify state of affairs where a closer look would be necessary. Often, these claims tend to explain the present exclusively by the past, concealing that by now there is a unique present state that might be explained by history as a necessary but not sufficient condition, as a heuristic story for today. Moreover, the thin ice crust of sound empirical studies available on African countries is over-generalized to the total territorial body of Sub-Saharan Africa, ignoring the immense diversity in this part of the world. Finally, most of the conducted studies incorporate western instruments without proven ecological validity, and arrive at conclusions about underlying constructs although the instruments show poor factor structures or internal consistencies.

After presenting some of these shortcomings in current research on Africa, the present study attempts to overcome at least some of these limitations. It focuses exclusively on Ghana and does not claim African universality. Still, the intra-Ghanaian context of the present study consists of organizational bodies that are found without large structural differences everywhere in the world – banks – and so allows for principle comparability of

the results and highest possible content validity for the used western instruments. Banks are plausibly among the most modern of all organizations within the country, concerning human resource management, leadership and organizational structure, and so make up the perfect contrast foil for finding cultural peculiarities, guiding behavior in a transitional economy entrenched between the future and the past. This approach allows conclusions about which social categories will have to be handled with care in team building in future organizations to come when the development process progresses further.

The validity problem was addressed through a preparatory qualitative study, using the repertory grid technique, which created items for the questionnaire used in the subsequent quantitative study. Moreover, the western instruments like LMX were validated in Ghana for the first time.

The structure of this thesis reflects the problems faced during the literature review, data collection and data analysis. Most of them were clearly attributable to the context, Ghana, an African country, e.g.: the scarcity of literature in general; methodological flaws of either poor study design in studies conducted by Africans or little knowledge of context and culture, leading to wrong conclusions, in western studies; a high acquiescence bias, resulting in low differentiation and a meaningless overlap of variance; item wording that led to comprehensibility problems, mostly accounted for by western questionnaires. Most of these problems are reflected on in section 1.1 'The context: Ghana in Africa', which can be understood as a preface, necessary for everyone new to psychological research on the African continent. Relevant psychological research considering Ghana is very sparse, so the superordinate entity - Africa - was examined. The section starts with a critique on the scientific treatment of Africa and might also be interesting for Africa veterans. In searching information about Ghana in Africa, it became clear that a psychological 'Africa' construct is the first faulty assumption when conducting research on this continent. Subsequently, the Ghanaian context is described in terms of history, ethnical composition and gender issues, and the few relevant studies that included Ghanaian samples are laid out - quite a colorful collage, ranging from crosscultural to gender studies.

After these first two sections, the core theory of this thesis is derived from social and organizational psychology, subsumed under the person-environment fit agenda (Kristof-Brown, Zimmerman & Johnson, 2005), incorporating relational demography (Tsui & O'Reilly, 1989) and workgroup diversity. There have been no studies in Ghana, not even in Sub-Saharan Africa (excluding South Africa as a special case in many respects), at least none the author is aware of, which could be sorted under these headings. So after being pitched into Sub-Saharan Africa, the reader is suddenly surrounded by the psychological realities of Mexicans or Hong Kongese, while most of the presented

research was conducted in the US. It might feel strange to find Africa or Ghana only rarely mentioned, but the previous sections already warned about invalid conclusions. The present study tries to combine two worlds, the African and the Western philosophy, the ethnological and the psychological method, the cross-cultural and the within-culture perspective. If these worlds would be the same, there would be no need for further research. The logic of compromise, of fitting things that appear not to fit, is pivotal for the present work, and its central methodological problem.

Section 1.3 provides theoretical information and empirical evidence concerning the instruments used in the study for measuring performance, leader-member exchange and the work related attitudes affective commitment and job satisfaction.

Section 1.4 describes philosophical fundamentals of constructivism, a useful framework for approaching cultural differences in general and the theoretical background for the repertory grid technique, used for developing an instrument to measure dyadic relationship quality with a Ghanaian item bias. Chapter 1 concludes with a summary and hypotheses.

The second chapter – methods – describes the two conducted studies, the qualitative preliminary and the quantitative main study, which had overlapping but not similar samples. The qualitative analysis is not presented in much detail, although it might be one of the most interesting parts, as it describes the construed reality of dyadic leader-follower work relations in Ghana. Instead the focus is on the generation of items for the second quantitative part. There, construct validity was a central issue; all scales were analyzed using internal consistencies, exploratory and more conservative confirmatory factor analysis (CFA). The CFA results are depicted graphically to convey a feeling for the data structure. It is believed that an in-depth analysis of the scales is necessary for conducting any further computations. This analysis led to the omission of some scales and frustration about the apparent one-dimensionality of the newborn leader-follower relationship quality questionnaire, which even so overlapped with the western instrument for leader-member exchange quality assessment (LMX-MDM, Liden & Maslyn, 1998).

Results were computed using state of the art multilevel analysis, an approach only rarely found in person-environment fit research, although it gains more and more popularity. Its appeal lies in the partitioning of variance if data is nested. In the present study followers were nested in workgroups with one leader. This procedure is explained in detail in section two of the results chapter; for theoretical basics see e.g. Bryk and Raudenbush (1992). The statistical handling of person-supervisor fit is quite unique and was not found in the previous literature, most likely because it is not at all trivial. Most of

the significant results are interactions and depicted graphically to support comprehensibility.

This thesis is long, and it took a long time to write it. Its length is due to handling the context and its peculiarities as non-trivial, to high methodological standards and the belief that graphics ease understanding. When the research started 2004, PsychInfo returned around 400 articles concerning Ghana, 2007 the number rose to around 550. This thesis will add up to the psychological knowledge available for Ghana and hopefully sharpens the senses for the scientific maltreatment of a whole continent. The African countries are more than a playground for ethnologists. Their societies and economies are in transformation, in transition. And maybe an unstable system is particularly suited to study its inherent rules. If psychologists want to learn about the context of human behavior, cognition and emotion, why do we ignore Africa? There might be no better place for such an endeavor.

1 Theory

# **1 THEORY**

#### 1.1 The context: Ghana in Africa

The present study was conducted in Ghana, one of the territorially smaller African countries south of the Sahara, covering around two thirds of the landmass Germany does, domicile to nearly 23 million people (Central Intelligence Agency, 2007), bordering Togo, Ivory Coast and Burkina Faso. Despite the many books written about Ghana, there is little psychologically relevant knowledge. A search in PsychInfo for the term "Ghana" in any field yields 553 hits (May 2007), 412 before the study started (September 2004), a majority of which is occupied with curio topics like "Sensory characteristics of fufu prepared with cassava roots (Manihot Esculenta Crantz) stored in polyethylene sacks" (Opare-Abisaw, Asante & Annan, 2004). The dearth of literature on the psychologically common in Ghana makes it necessary to search the next higher level of analysis in order to find a stable foundation on which to build hypotheses - Africa.

The second biggest continent on earth covers 30,3 million square kilometers, 22% of the earth's total, three times more than Europe. It is inhabited by 848,65 million people, fractionalized into an immense amount of ethnic groups. Reportedly the cradle of Homo sapiens around 160 000 years ago. Economically one of today's most struggling and problematic regions: 31 of the 40 poorest countries listed by the 2006 Human Development Report are part of Sub-Saharan Africa. The more developed, Muslim dominated northern part of the continent will be excluded from the further discussion – it has a different economic standing, culture, tradition, religion and language. In the following, Africa will stand for Sub-Saharan Africa only, which is consistent with anthropological (Murdock, 1981) and psychological (e.g. House, Hanges, Javidan, Dorfman & Gupta, 2004) research. Having said that: Is it valid to draw conclusions about the state of affairs in Ghana from knowledge on Africa?

It might be comprehensible not to find a huge amount of helpful psychological articles, reporting on research devoted to diversity in the work context in Ghana. But the general lack of work and organizational studies, of psychological research reports in general, and so of interest in Sub-Saharan Africa, is astonishing. There are exceptions like the studies of Blunt (1980), Jackson (2004), Ugwuegbu (2001), Noorderhaven and Tidjani (2001), or Spangenberg and Theron (2002), who all mention their own surprise about only cursory attention to Africa. More often than not, this attention was of low quality and effort, which made it hard to find a theoretical framework, covering the peculiarities of the context.

In general the reviewed literature on Africa or single African countries showed important lack in:

#### 1. Theory.

Both western and African researchers use romantic traditional ideas in approaching Africa. As most African countries are transitional economies, their present culture might be rooted in the past but is strongly anchored in and centered on the present and related to the process of constant change.

#### 2. Instruments.

Researchers univocally acknowledge the unsuitability of western instruments but still use them – because they lack alternatives. It is thus unclear if they miss important aspects of reality in Sub-Saharan Africa.

#### 3. Psychological status quo.

There is an extensive literature on Africa, but only few psychological work. Most of the psychological studies are devoted to the odd rather than the common. Crosscultural studies focus on value differences across countries. Little is known about the state of affairs within.

#### 4. Differentiation.

It is impossible to phrase the favorite dish of Europeans. That is because Europeans are quite different. The same is true for Germans. To find a traditionally anchored recipe, it is necessary to go down to the state level. The same applies to Africa, which still is treated as an entity.

Africa is in need of theories, proper instruments that capture relevant aspects of the reality of life from a native perspective; data based knowledge about the status quo and countrywise differentiation. It is surprising that even major cross-cultural studies did either more or less neglect Africa (Schwartz, 1994; Trompenaars & Hampden-Turner, 1998), only used convenience sampling of countries (House et al., 2004), accumulated country level data without theoretical justification (Hofstede, 1980; McCrae, 2005a,b) and did not address questions of diversity across and within the African countries properly (all). Africa's nations often seem to be included in broad research projects for the sake of completeness or the claim of universality.

In his classical study on IBM employees, Hofstede (1980) considered Africa but

- a) only white subjects in the South African sample and
- b) assessed not enough data to consider single African countries but used aggregate scores for hypothetical West and East African regional clusters, which are quite diverse in itself (see p. 1.1.2.2).

There was not and still is little evidence supporting this procedure, which was only used for African and Arabian countries. As his work is a frequently used basis for other studies

(e.g. McCrae et al., 2005; Smith, Peterson & Schwartz, 2002; Dia, 1996), this basic and possibly faulty assumption bears more and more unhealthy children that do not help to found psychological hypotheses on stable theoretical grounds in countries like Ghana.

In the biggest recent cross-cultural study on leadership House et al. (2004, p. 97) argue that they prefer the term "societal culture" to "country" or "nation" to recognize the "complexity of the cultural concept". Sometimes they sampled two subcultures from one nation as "It was recognized that national boarders may not be an adequate way to demarcate cultural boundaries because many countries have large subcultures." If this is true for European countries like Switzerland (French and German samples) or Germany (East and West samples), it should hold even more for African countries like Ghana, comprising 25 spoken languages around 100 different ethnical groups (Brown, 1983), some with patrilineal, some with matrilineal traditions. And it definitely applies to the entity House et al. subsequently referred to as Sub-Saharan Africa. Hofstede and Hofstede (2005) found language dependent cultural clusters, Noorderhaven and Tidjani (2001) a factor discriminating French from English questionnaire versions in Africa. Masculinity opposed to femininity is one of the four cultural differences originally found by Hofstede (1980). It seems plausible to assume that the variance in gender roles and language traditions should already make a difference within (Jackson, 2004), and lead to differences across African countries, as their set-ups differ to a large extent.

Moreover, biases are introduced through using western instruments, a procedure critically dubbed cultural imperialism or ethnocentrism (e.g. Poortinga & van Hemert, 2001; Hofstede & Hofstede, 2005). It is not enough to prove that a measure is psychometrically equivalent and valid, it has to capture a part of reality that is of equal importance and related content. In their publication, reporting about the construction of a uniquely South African leadership questionnaire, Spangenberg and Theron (2002) state that the diversity of the South African managerial population would not be reflected by foreign questionnaires, that language and expressions used in foreign questionnaires would not always be clear to managers who are not first-language English-speaking South Africans, and that none of the current overseas questionnaires would fully satisfy the needs of leaders and managers in the South African context. These circumstances call for qualitative methods before conducting quantitative questionnaire studies that are possibly meaningless in the Sub-Saharan context. A qualitative approach would also be helpful in generating robust theories that ease hypothesizing instead of relying on popular or ethnologic literature.

An easy explanation for these methodological flaws is: Africa is economically underdeveloped, the region underwent a major backdrop in development due to the still