Stereotype Threat and Faultlines Based on Cultural Diversity in Engineering Education in Germany*

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This study is concerned with the evaluation of cultural awareness and its impact on student life at two German technical universities. Since the government is advertising internationally for students to come study in Germany, we were interested to find out, whether diversity is already fully accepted or needs more attention. In the interviews conducted it turned out that the general self-assessment of cultural diversity is rather low, especially among German students. Furthermore, we discovered that there seem to be differences between universities in small-scale and large-scale towns regarding stereotype threat and faultlines. Interaction and confrontation are crucial measures to reduce stereotype threat and faultlines among student groups. Faculty staff and institutional stakeholders must pay more attention to enhancing and empowering an awareness for cultural diversity as a key skill for future business life.

Keywords: cultural diversity; stereotype threat; faultlines; higher education; STEM

1. Introduction

Engineering education is one of the most important and innovative areas in German academia. Since the beginning of industrialization, it has led to manyfold economic developments and a bigger general prosperity. Currently, Germany is facing a lack of qualified personnel in many parts of the engineering industries and major actions were taken to increase interest, especially among women and migrants, in choosing careers in STEM (Science, Technology, Engineering and Mathematics), e.g., the EU-working visa *Blue Card* [1], a program by the employer's union concerning the future of STEM studies (*MINT Zukunft schaffen!*) [2], the federal program *Study in Germany* [3] or individual project support by the *Stifterverband* [4].

As a result, managing cultural diversity [5] has become an important asset for faculty staff in consulting and teaching a more diverse studentry [6]. At the same time, globalization fueled international business operations and today many companies expect graduates to enter working life wellprepared for cultural diversity. Therefore, students must learn to manage cultural diversity in contact with each other at the university and become fully prepared for their working life, not only concerning professional knowledge, but also regarding social skills, such as teamwork, responsibility, and reliability. Apart from acting independently and being able to use instruments and tools, interacting in socially heterogeneous groups is the third key competence, students should acquire explicitly at university according to the Organization of Economic Co-operation and Development (OECD) as described by Elmar Lange [7]. Following a brandnew publication by Cristina Allemann-Ghionda from 2021 comparing perspectives on internationalization, inclusion and diversity at German universities, especially aspects of diversity and effects of internationalization need further research [8].

We used a mixed approach to verify the consciousness of cultural diversity and to examine stereotype threat and faultlines among students at two universities of applied sciences in Germany. It was our aim to find out, how much awareness of cultural diversity students show and whether they reflect on their own cultural traits [9]. Interested in the sociopsychological implications, we compared local students, international students, and students with postmigration background, belonging to more than one culture. In the next step, we were interested in the relation of cultural traits and stereotype threat among these students, stereotype threat referring to the fear of being judged based on cultural clichés [10]. Finally, we asked students about their network relations, from which we were able to conclude faultlines. By faultlines we refer to imaginary boundaries or invisible barriers that exist between groups, which can enhance the performance of students when low, but also stymie studies when high [11].

With our study we want to approach aspects of diversity, that might influence a student's life and the transition into professional life and identify aspects which still need more attention and support by the faculty. Last but not least, we want to compare two applied universities of a medium size town and a metropole, to evaluate the influence of location. Apart from mere inhabitance figures (Munich: 1.5 million, Osnabrück: 160.000), the proportion of international applicants at both locations varies greatly, with Hochschule München University of Applied Sciences (MUAS) admitting 14% students from abroad [12] opposed to Hochschule Osnabrück University of Applied Sciences (OUAS) counting only 2% of international students [13]. Both universities of applied sciences share that they invest into international studies and exchange programs, offering classes in English and supporting global approaches to science [14-15]. They are members of the UAS7, a network of seven German Universities of Applied Sciences (UAS), which promotes connectivity and internationality [16].

In this paper, we will first outline the methods used to collect and evaluate our data. Then we will present and compare our results from both UAS and finally, we will look at possible reasons for differences in the discussion at the end of this paper.

2. Methods

2.1 Sample Description

Procedure and compilation of the sample in this project are explained based on the study at MUAS. In the summer semester of 2019, 3,207 students in the final semesters for bachelor's and master's degrees in STEM education were contacted by email. They were asked to participate in a short survey and to be available for a one-hour interview.

143 students participated (response rate 5.9%) in the survey and 59 students were selected for an interview, with cultural diversity in the context of migration as the central parameter. Four roughly equal groups were formed, one with international students, one for the first post-migrant generation (father/mother or both came from abroad), one for the second post-migrant generation (grandfather/ grandmother or both came from abroad) and lastly the group with local students, who have not experienced migration in their families.

Assuming that gender of students could also have a strong cultural influence, the proportion of men

and women was controlled. The proportion of women increased slightly between the initial letter (25%) and participation in the interview (34%). The generation of the sample at OUAS was similar and only adapted to local conditions.

After the interview, the subgroup of international students at MUAS counted 13 participants, while this group consisted of 6 students at OUAS. Regarding the students with one or both parental parts having immigrated, the group at MUAS was 18 students, while OUAS counted 7 students in this group. At OUAS there were no participants with a post-migrant background in the second generation, where 12 students were interviewed at MUAS, whose grandparents immigrated into Germany. The group of local students, having no immigration in their family history within the last two generations, was 16 students at MUAS and 18 students at OUAS. In total, the sample comprised 90 students (Table 1).

2.2 Research Methods

Two different methods were chosen for the research: a quantitative survey with a scale from 1 to 7 and a qualitative survey for the same questions. If quantitative information was provided by respondents, it was simultaneously supplemented and verified by qualitative in-depth analysis. For the survey, an interview guideline was developed and pretested. It includes seven focal points: general information (10 items), diversity (8 items), cultural diversity (15 items), stereotyping threat (11 items), group faultlines (9 items), societal approach to diversity (7 items) and intercultural competence (7 items). Experiences from other STEM-related projects [17] and scientifically required rules of questionnaire development [18] were used for item generation. The questionnaire can be shared for reasons of research. Please contact the authors for further information.

The interviews were conducted between March and July 2019, recorded, and transcribed according to established rules. All statements of our subjects were processed using the technique of qualitative content analysis [19]. Coding was done with MAXQDA, as were statistical analyses and graphics, which were supplemented by STATA and Excel.

	International students	First postmigration students	Second postmigration students	Local students	Total
MUAS	13	18	12	16	59
OUAS	6	7	-	18	31
combined	19	25	12	34	90

3. Results

3.1 Awareness of Cultural Diversity

Comparing results from both universities, we see an overall similar picture concerning the awareness of cultural diversity [20] (Fig. 1). The level of cultural awareness is highest among international students, ranking themselves between 1 and 7 as different to their co-students at a mean of 3.9 in both cities. However, the first and second generation after immigration still show a relatively high level of awareness (3.4). The rate of cultural awareness lessens, the more rooted students are, showing low rates of awareness among local students at a mean of 2.6.

International students at MUAS rank their diverseness to other students at 4.0 (SD 0.85), showing similar results to international students of OUAS at 3.9 (SD 0.99). However, in the first post-migrant generation results in Munich and Osnabrück show a trend to difference. MUAS students index a higher level of cultural awareness (3.5, SD 0.75) than OUAS students with migration background (3.0, SD 0.91). Results for local students at both universities demonstrate the same picture, with MUAS students evaluating their diverseness at a 2.7 (SD 0.86) and OUAS students ranking themselves at 2.2 (SD 0.58), exposing a significant difference (t-test, p = 0.01).

We found that students of non-German or mixed background show a higher awareness for cultural diversity than students of mere German background, proving immigration to have a strong and long-lasting impact on one's cultural awareness (Fig. 1). Results clearly suggest that the level of awareness changes with each generation. Figures from MUAS display a significant difference between international and local students (t-test, p = 0.001), as well as between the first post-migrant generation and local students (t-test, p = 0.05). An overall tendency of reduced cultural awareness in



Fig. 1. Self-evaluation of cultural diversity at both UAS.

post-migrant generations is visible, but the second generation of immigrants still feels different from students with no migrant background.

Based on Gardenswartz & Rowe's model *Four Layers of Diversity* [9] we evaluated 14 different cultural traits from the internal and external dimensions in more depth and asked students, whether they differ from their co-students for each of these traits and if so, how strongly they felt the discrepancy (see Appendix, Fig. A1).

Looking at the answers provided by all interviewed students, differences were to be found for all traits in question. Specific cultural traits, such as demeanor and ways of communication, remain important differences between cultural groups through many generations. Other traits, such as diversity in religion and appearance become more important in the first post-migrant generation, and yet other traits, like livelihood gain more prominence in the second generation. These changes were phrased by one student as I was taught all traditions, but I drink alcohol for example, but I would call myself muslim ("Ich habe alles beigebracht bekommen, trinke trotzdem Alkohol beispielsweise, aber ich würde mich selber schon dennoch als Moslem bezeichnen") [Interview ID 83 MUAS]. The picture at OUAS showed similar results with many differences between students (see Appendix, Fig. A2).

3.2 Stereotype Threat

As a sociological phenomenon known around the globe, cultural diversity often leads to intergroup bias, which results in stereotype threats [10]. However, stereotype threat is not prevalent among our study group in Munich. All participants show a stereotype threat at a similar level (MUAS average 46.4%). The difference between German and non-German students at MUAS regarding stereotype threat was insignificant (Fig. 2). From the students' qualitative answers, we understand that stereotypes at MUAS are not seen as necessarily negative or a disadvantage, moreover many examples were given that certain traits could be seen and used as an advantage.

The situation differs in Osnabrück, where international students show a higher level of stereotype threat and German students disclose fewer doubts (Fig. 2). Excelling to 61.4% indicates a significantly higher fear to get stereotyped among students from abroad compared to local students (χ^2 , p = 0.01). International students at OUAS phrased this feeling as *I don't share my views, because people would not understand me* ("Ich sage nicht immer meine Meinung, weil man mich nicht verstehen würde") [Interview M_30_OUAS]. This initial stereotype threat seems to disappear within the first generation



Fig. 2. Stereotype threat at both UAS in percent.



Fig. 5. Faultlines at both UAS in percent.

of post-migrant students, who show a stereotype threat of 46.4%. However, the difference to students with no migrant background is still visible. Local students show a stereotype threat of 37.7%, which surpasses figures from MUAS.

It is striking that stereotype threat of international and local students respectively are quasi mirroring numbers (Fig. 2), while the group of students with more than one cultural background demonstrates similar numbers to MUAS (Fig. A1).

3.3 Faultlines

The following examination of faultlines [11, 21] shows yet another facet. As they did for stereotype threat, results from OUAS and MUAS vary immensely.

At MUAS we see an overall trend of low faultlines (Fig. 3). While local students have the highest permeability (22.0%), implying low barriers and good access to help in their studies, the level of invisible boundaries rises for students with migrant background. From 29.5% for the second postmigrant generation, to 36.9% in the first postmigrant generation to 45.9% among international students.

At OUAS tendencies trend towards high faul-

tlines for international students (65.6%), being the only subgroup with a permeability below 50% (Fig. 3). All other groups share a higher permeability than faultlines. Asked about their social group at OUAS, answers revealed that groups exist basically with some others in the master [study program] that we are not from Germany like trying to understand German culture [Interview M_7_OUAS]. The difference to local students is highly significant (χ^2 , p = 0.01). The level of faultlines at OUAS is generally quite high, with German students showing 42.1% for the first postmigrant generation and 38.9% for locals respectively, exceeding faultlines among German students at MUAS. There seems to be less permeability between subjects at OUAS, as students describe it: We all study health sciences and I don't have any friends from other studies ("Wir studieren auch alle Gesundheitswissenschaften, also ich hab jetzt sonst keine Freunde außerhalb meines Studiengangs") [Interview D_29_OUAS]. It is surprising to see similar figures for German students with or without post-migrant background at OUAS experiencing limited access to other groups at university, while German students at MUAS seem to overcome these faultlines more easily.

4. Discussion

4.1 Awareness of Cultural Diversity

Concerning the evaluation of one's cultural diversity, we saw a big gap between German and non-German students at both universities of applied sciences. Coming from abroad, international students are confronted with a different culture and therefore evaluate their own diverseness in regard to this new culture. German students seem to be less aware about their own cultural traits or see them as less important being part of the majority group. Both results can be explained as known effects of the social identity theory, the *above-average-effect* for international students and the below-averageeffect for local students respectively [22]. We are able to show that the impact of cultural diversity declines with generations after immigration, but students still feel different in the second postmigrant generation, meaning their grandparents immigrated into Germany. This result implies that otherness is kept over generations in Germany [23]. This might hint at an unnaturalized society as described by Nils Witte in his dissertation on the intricacies of naturalization in Germany [24].

Apart from this general trend, we see differences between the two universities. Looking at inhabitance figures, Munich being nearly ten times the size of Osnabrück, lacking internationality seems to reduce occasions in which to reflect on one's iden-

tity. Likewise, having more international students seems to increase the awareness of cultural traits among German students of all generations in Munich. Referring to Gordon Allport's contact hypothesis [25] our findings validate that higher frequencies of interaction and confrontation support acceptance and understanding for each other, while less opportunities for contact keep cultural awareness at a low level. However, our results also reflect on Tropp and Pettigrew's observation that a positive contact outcome is generally stronger among majority groups, since minority groups bring a hope for recognition into intergroup encounters [26]. This supplement to Allport's theory further corresponds with our results for international students at both UAS being similarly aware about cultural traits, while local students at MUAS and OUAS differ significantly. Combining both theories, German students at MUAS seem to be more aware about their privileges hence showing a higher cultural awareness than local students at OUAS.

Both universities are part of the UAS7, a network of seven German universities of applied sciences that endeavors internationality and global networking. However, it seems that the impact of these measures taken by both UAS is rather low, while the impact of contact and self-reflection given in big international cities seems to be quite strong.

4.2 Stereotype Threat

The level of stereotype threat varied at both universities, MUAS displaying even levels and OUAS showing great differences between subgroups. At OUAS students from abroad felt a very high threat of stereotyping, while German students with and without post-migrant background showed lower, but still relatively strong figures of stereotype threat. Both UAS offer various programs, such as welcome services, international clubs, or language tandems to support international applicants. Referring to their diversity figures, approx. 14% of international applicants at MUAS and 2% at OUAS, having a large international student body seems to equilibrate stereotype threat among all students. The effects of programs on attracting international students need to be evaluated in further research. More focus should be put on the perception of international students, as a sense of belonging seems to be the crucial difference between UAS with fewer or higher international studentry [27].

We must keep in mind, that acculturation can mean an integration of the new and old culture but may also result in choosing one culture over the other by assimilation or separation. It is important to enhance inclusive forms of acculturation and prevent marginalization or rejection of any culture [28]. Results suggest acculturation to be the major key to integration and show various influencing factors of this process, mirroring the concept of *acculturation in movement* as proposed by Howarth et al. [29]. Concerning OUAS we suspect that international students may feel stymied due to a language barrier, while at MUAS, being an international city, language has less influence. Furthermore, research into this sense of belonging is necessary.

4.3 Faultlines

When asked about the permeability between groups to determine intergroup faultlines, it became clearly visible that students of German background face far less difficulties to talk to other groups. Students of non-German background, even in postmigration cohorts, are confronted with much higher boundaries and have trouble asking other groups for help or advise. As an outcome, non-German students have less opportunities than German students and suffer from their cultural diversity. It was rather surprising that faultline levels for local students at OUAS were almost twice as high as figures from MUAS.

We would advise to look at the number of students who commute to and from university to their hometowns every day and therefore experience a low level of integration into student networks [27]. Our impression from this subgroup in MUAS showed that commuting students face relatively high faultlines. This might further explain significantly higher faultlines for local students at OUAS, many students commuting between home and OUAS. Nearly half of OUAS' first semesters come from the neighboring federal state [12, 13].

We want to suggest a proactive reduction of faultlines at universities to encourage students to interact with and gain from each other interculturally. This can be achieved by student partnerships as proposed by Smolcic and Arends [30], appointing mixed project teams and supporting diverse group projects to enhance occasions for interaction. It is important to point out that all measures need to be undertaken by the institutions and are meant as didactic implementations.

5. Conclusion

Our results and the ideas presented in the discussion lead to the following conclusion. The majority of local students have had little engagement or connection to cultural diversity before applying at a university. While we can find a focus on internationalization and inclusion of diversity within most academic curricula, we should pay more attention to implement these topics in schools. As for now, we need to take into account that first-year students enter university with a very heterogeneous understanding of diversity and inclusion, depending on their educational system, family background and personal experience. These findings strongly support the importance of general education at universities, and we are yet to find out, how exactly this training helps graduates when entering modern and diverse working life.

In our follow-up study we will be concerned with

the transition of graduates into work and want to contrast the self-evaluation of graduates with their managers' perspective, in order to find recommendations and advice for companies to support new entries. The students' experience is surely not restricted to the field of STEM and could be examined in other fields of study or institutions. Likewise, all recommendations given need to be put to the test and we need further research into reclining faultlines and its positive effect on cultural competences.

References

- 1. F. Georgi, N. Huke and J. Wissel, Fachkräftemangel, Lohndumping Und Puzzle-Politik: Die Europäische >Blue Card< Als Arbeitskraftpolitisches Projekt, *Kämpfe Um Migrationspolitik: Theorie, Methode Und Analysen Kritischer Europaforschung*, ed. Staatsprojekt Europa, Transcript Verlag, Bielefeld, 2014.
- M. Buhse, FACHKRÄFTEMANGEL: Wirtschaft Setzt Auf MINT, Personal, 60(5), 2008, pp. II–III. JSTOR, www.jstor.org/ stable/24390114. Accessed 9 Aug. 2021.
- 3. Homepage of the official campaign of the German government for Germany as a student location, https://www.study-in-germany.de/ en/, Accessed 16 April 2021.
- 4. Homepage of a joint initiative by German companies and foundations to promote improvements, https://www.stifterverband.org/ english, Accessed 19 April 2021.
- 5. R. R. Thomas, Beyond Race and Gender: Unleashing the Power of Your Total Work Force by Managing Diversity, Amacom, New York, 1991.
- F. Linde and N. Auferkorte-Michaelis, *Diversität Lernen Und Lehren Ein Hochschulbuch*, 1st ed., Verlag Barbara Budrich, Opladen; Berlin; Toronto, 2018.
- C. Allemann-Ghionda, Diversität, Inklusion Und Internationalisierung in Der Hochschule: Eine Komparative Perspektive, Handbuch Inklusion International / International Handbook of Inclusive Education: Globale, Nationale Und Lokale Perspektiven Auf Inklusive Bildung / Global, National and Local Perspectives, ed. by Andreas Köpfer et al., 1st ed., Verlag Barbara Budrich, Opladen; Berlin; Toronto, pp. 473–498, 2021.
- 8. E. Lange, Zur Verbesserung von Schlüsselkompetenzen in universitären Lehrveranstaltungen. J. Labour Market Res., 45, pp. 63–78, 2012.
- 9. Homepage of Gardenswartz & Rowe, https://www.gardenswartzrowe.com/why-g-r, Accessed 20 April 2021.
- 10. T. D. Nelson, Handbook of Prejudice, Stereotyping, and Discrimination, Psychology Press, New York, 2009.
- D. C. Lau and J. K. Murnighan, Demographic Diversity and Faultlines: The Compositional Dynamics of Organizational Groups, *The Academy of Management Review*, 23(2), pp. 325–340, 1998.
- Website of Hochschule München University of Applied Sciences on student figures, https://www.hm.edu/allgemein/hochschule_ muenchen/familie_gender/diversity/daten.de.html, Accessed 15 April 2021.
- Website of Hochschule Osnabrück University of Applied Sciences on student figures, https://www.hs-osnabrueck.de/wir/wir-stellenuns-vor/wir-in-zahlen/#c167012, Accessed 15. April 2021.
- 14. Homepage of Hochschule München University of Applied Sciences: https://www.hm.edu/en/, Accessed 16 April 2021.
- 15. Homepage of Hochschule Osnabrück University of Applied Sciences: https://www.hs-osnabrueck.de/en/, Accessed 16 April 2021.
- 16. Homepage of the university network UAS7: https://www.uas7.org/en/home, Accessed 16 April 2021.
- 17. E. Semke, *Erfolgreicher MINT-Abschluss an bayerischen Hochschulen. Bilanz der Hochschulprojekte.* Bayerisches Staatsministerium für Bildung und Kultur, Wissenschaft und Kunst, München, 2015.
- 18. R. Porst, Fragebogen. Ein Arbeitsbuch, 4th edition, Springer Verlag, Berlin/Heidelberg, 2013.
- 19. P. Mayring, Qualitative Inhaltsanalyse. Grundlagen und Techniken, Beltz Pädagogik, Beltz Verlag, Weinheim, 2015.
- 20. G. Hofstede, Culture's Consequences, Sage, Thousand Oaks CA, 2001.
- 21. H. Tajfel and J. C. Turner, The Social Identity Theory of Intergroup Behaviour in S. Austin & W.G. Austin (eds), *Psychology in intergroup relations*, Nelson Hall, Chicago, 1986.
- 22. K. Eriksson and A. Funcke, A Below-Average Effect with Respect to American Political Stereotypes on Warmth and Competence, *Political Psychology*, **36**(3), pp. 341–350, 2015.
- 23. I. Mchitarjan and R. Reisenzein, Towards a Theory of Cultural Transmission in Minorities, Ethnicities, 14, pp. 181-207, 2014.
- 24. N. Witte, Negotiating the Boundaries of Belonging: The Intricacies of Naturalisation in Germany, Springer VS, Wiesbaden, 2018.
- 25. G. W. Allport, The Nature of Prejudice, Addison-Wesley Publishing Company, Reading, Massachusetts, 1954.
- 26. L. R. Tropp and T. F. Pettigrew, Relationships between Intergroup Contact and Prejudice among Minority and Majority Status Groups, *Psychological Science*, **16**(12), pp. 951–957, 2005.
- S. Hurtado and D. F. Carter, Effects of College Transition and Perceptions of the Campus Racial Climate on Latino College Students' Sense of Belonging, *Sociology of Education*, 70(4), pp. 324–345, 1997.
- D. L. Sam and J. W. Berry, Acculturation: When Individuals and Groups of Different Cultural Backgrounds Meet, *Perspectives on Psychological Science*, 5(4), pp. 472–481, 2010.
- C. Howarth, W. Wagner, N. Magnussen and G. Sammut, It's Only Other People Who Make Me Feel Black': Acculturation, Identity, and Agency in a Multicultural Community, *Political Psychology*, 35(1), pp. 81–95, 2014.
- 30. E. Smolcic and J. Arends, Building Teacher Interculturality: Student Partnerships in University Classrooms, *Teacher Education Quarterly*, **44**(4), pp. 51–73, 2017.



Appendix





Fig. A2. Cultural diversity traits among students at OUAS (international vs. local students).

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