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A cross-cultural comparison of affective teacher-student relationship quality and associations with shyness between the Netherlands and China

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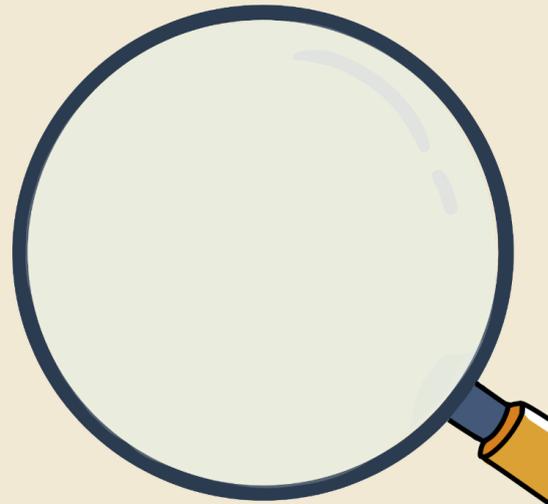
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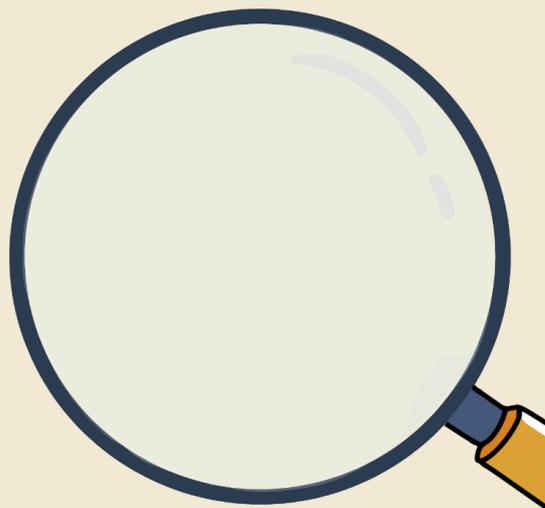
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Summary



Summary

The affective quality of teacher-student relationships (i.e., the emotional bond between teacher and student) has long been found to be important for students' school adjustment, such as their engagement with schoolwork, academic achievement, and behavioral development. Teacher-student relationships characterized by high levels of closeness (i.e., warmth, open communication, support) provide students with emotional security to comfortably explore the school environment and become well-adjusted in later life. In contrast, high levels of conflict (i.e., disharmony, quarrels, and fights) and dependency (i.e., students' overreliance and display of clingy behaviors on the teacher) in the relationship, evoke emotional insecurity in students, which prevents them from exploring the school environment and harms their well-being. The way how students and teachers experience the quality of teacher-student relationships, however, can differ across countries, due to the impacts of different cultural values (e.g., individualism versus collectivism). For instance, teachers and students in Eastern, collectivistic countries are believed to experience more closeness and dependency, but less conflict in their mutual relationships than teachers and students in Western, individualistic countries.

Furthermore, student characteristics (e.g., shyness) also play an important role in shaping teacher-student relationship quality, whereas these associations may also differ across countries. For example, shyness is generally deemed maladaptive in Western, individualistic countries, but is traditionally appreciated in Eastern, collectivistic countries. Thus, shyness may have more positive influences on teacher-student relationships in Eastern, collectivistic countries than in Western, individualistic countries. This dissertation thus aimed to investigate whether (1) the quality of teacher-student relationships and (2) the link between shyness and teacher-student relationship quality differed across the Netherlands (a Western, individualistic country) and China (an Eastern, collectivistic country). As teachers and students may have different perspectives about their mutual relationships, we included both teachers' and students' conscious perceptions of the relationship quality as measured with questionnaires. For students, we also looked at their unconscious relationship perceptions, measured with relationship drawings. Finally, the quality of teacher-student relationships, as well as the influence of shyness on children's social relationships, changes as children grow older. Hence, the two research aims were explored both in upper elementary school (third-to-sixth grade) and in the early school years (kindergarten and first grade).

Summary

Chapter 2 and Chapter 3 focused on the first research aim. In **Chapter 2**, we investigated cross-cultural differences in the relationship between teachers and upper elementary students (third-to-sixth graders). The sample included 789 students and 35 teachers in the Netherlands, and 587 students and 14 teachers in Zhejiang, China. Teachers reported their relationship quality with eight randomly selected students on the closeness, conflict, and dependency subscales of the Student Teacher Relationship Scale (STRS). Students rated their relationships with teachers on the closeness and conflict subscales of the Student Perception of Affective Relationship with Teacher Scale (SPARTS). Both the STRS and the SPARTS presented sufficient measurement invariance (i.e., partially strong invariance) across the Netherlands and China for making meaningful cross-cultural comparisons of relationship perceptions. Multiple group models showed that Chinese students reported more closeness and less conflict with teachers than Dutch students. Chinese teachers also experienced less conflict with students than Dutch teachers, whereas the degree of teacher-perceived closeness and dependency in the relationship did not differ across countries. Furthermore, agreement in teachers' and students' perceptions of closeness was higher in China, whereas agreement on conflict was higher in the Netherlands.

In **Chapter 3**, we compared the quality of teacher-student relationships in the early school years (kindergarten and first grade) across the Netherlands and China. The Dutch sample included 234 children and 35 teachers. The Chinese sample consisted of 190 children and 19 teachers. Teachers' perceptions of the relationship were assessed by the closeness and conflict subscale from the STRS (the dependency subscale was not reliable in the Chinese sample). Children's relationship perceptions were measured by the warmth and conflict subscales from the Young Children's Appraisals of Teacher Support (Y-CATS), which have presented sufficient measurement invariance across the Netherlands and China. Multiple group models showed that Chinese children experienced lower warmth and higher conflict with teachers than Dutch children. In contrast, Chinese and Dutch teachers reported equal levels of closeness and conflict with young children. The agreement between teachers' and children's perceptions of both closeness and conflict appeared to be equally strong across China and the Netherlands. Together with findings from Chapter 2, these results thus suggest that in line with the developmental systems model, the quality of teacher-student relationships can differ across countries. Cross-cultural differences in teacher-student relationship quality, however, seem to depend on whether teachers or children reported the relationship quality, and the developmental stage of the students under investigation.

In Chapter 4 and Chapter 5, we focused on the second research aim and examined

whether the link between students' shyness and teacher-student relationships differed across the Netherlands and China. **Chapter 4** investigated how shyness was linked to teacher-student relationship quality in upper elementary school. The sample and measurement of the relationship quality were the same as in Chapter 2. Students reported their own levels of shyness on seven items from the School Questionnaire (SVL), for which sufficient measurement invariance across the Dutch and Chinese samples was found. Results from multilevel regression analyses showed that in both countries, shyness was associated with less student-perceived closeness and more student-perceived conflict. Unexpectedly, both associations were stronger in China than in the Netherlands. Shyness was also associated with less teacher-reported closeness, with the associations being equally strong in China and the Netherlands. The association between shyness and teacher-reported conflict was not significant, neither in China nor in the Netherlands. As such, shyness seemed to be equally harmful (i.e., based on teachers' relationship perceptions) and maybe even more harmful (i.e., based on students' relationship perceptions) to teacher-student relationship quality in China than in the Netherlands. A plausible explanation could be that shyness has been depreciated in China in recent decades due to the influence of globalization and Westernization. Hence, helping shy students to build favorable relationships with teachers seems to be even more important in China than in the Netherlands.

In **Chapter 5**, we looked at the association between social inhibition (comparable to shyness) and teacher-student relationship quality in the early school years. For this study, we selected a subsample of children with available teacher-report from the sample used in Chapter 3, leading to a sample of 35 teachers and 201 children in the Netherlands, and 19 teachers and 152 children in China. Teachers reported children's levels of social inhibition on the Social Inhibition subscale from the Behavior Questionnaire for Two- to Sixth-Year-Olds-Modified (BQTSYO-M). Partially strong invariance across the Netherlands and China was found for this subscale. Just as in Chapter 3, teachers' relationship perceptions were measured with the STRS. Multilevel linear models revealed that social inhibition was associated with less teacher-child closeness, with this association being equally strong in China as in the Netherlands. Unexpectedly, social inhibition was associated with less conflict in the Netherlands, whereas this association was not significant in China. As such, these findings suggest that even for young children in China, shyness can harm the degree of closeness in teacher-student relationships, and this harm is as strong in China as in the Netherlands.

The abovementioned chapters focused on teachers' and students' conscious relationship perceptions as measured by relationship questionnaires. In Chapters 6 and 7,

Summary

we employed Student-Teacher Relationship Drawings (STRDs) to investigate upper elementary students' unconscious perceptions of teacher-student relationships. In **Chapter 6**, we examined the psychometric properties of the drawings in assessing students' unconscious relationship perceptions in the Netherlands and China. In this study, we included a subsample of students who finished a drawing, based on the sample used in Chapter 2. This sample consisted of 752 third-to-sixth graders in the Netherlands and 574 third-to-sixth graders in China. Their drawings were coded by two independent raters on eight dimensions, among which two are positive (pride/happiness, vitality/creativity) and six are negative dimensions (anger/tension, role reversal, bizarreness/dissociation, emotional distance/isolation, vulnerability, and global pathology). Intraclass correlations (ICCs) showed that the inter-rater reliability of the coding was sufficient to high, both in the Dutch sample ($.68 < ICC < .84$) and in the Chinese sample ($.72 < ICC < .85$). Multiple group models revealed partially strong invariance of relationship drawing dimensions across the Dutch and Chinese samples. Finally, in both countries, students' unconscious relationship perceptions had moderate associations with their conscious relationship perceptions ($-.32 < r < .29$) and with their school engagement ($.21 < r < .23$). Hence, these findings seem to suggest that student-teacher relationship drawings can be considered a reliable and valid measure of students' unconscious perceptions of teacher-student relationships both in the Netherlands and China and can be used to make meaningful cross-cultural comparisons.

After the psychometric quality of the relationship drawings was supported, we examined in **Chapter 7** whether cross-cultural differences were also found in students' unconscious relationship perceptions as measured by the relationship drawings. Furthermore, we investigated whether the associations between shyness and students' unconscious relationship perceptions differed across countries. Data were based on the same sample as included in Chapter 6. Regarding the first aim, multiple group models showed that Chinese and Dutch students did not differ in positive drawing dimensions (pride/happiness and vitality/creativity). For the negative dimensions, drawings of Chinese students displayed lower levels of anger/tension, role reversal, emotional distance/isolation, and global pathology than those of Dutch students. Interestingly, one negative dimension (vulnerability) was higher in the drawings of Chinese students than those of Dutch students. These results show that consistent with findings from students' conscious perceptions (Chapter 2), in general, Chinese students also perceived lower relational negativity in their unconscious perceptions than Dutch students. However, findings regarding positive drawing dimensions and vulnerability appeared to contradict findings based on students' conscious perceptions (Chapter 2). Thus, cross-cultural

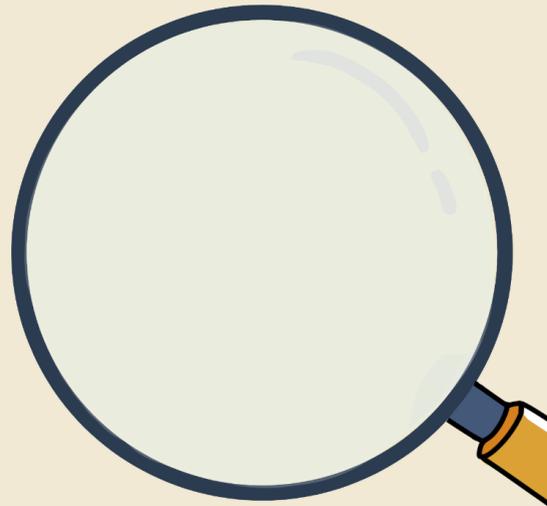
differences in students' relationship perceptions may depend on whether students' conscious perceptions or unconscious perceptions of the relationship are concerned.

For the second research aim, unexpectedly, shyness was not significantly associated with students' unconscious relationship perceptions at all, neither in the Dutch sample nor in the Chinese sample. Hence, shyness may not harm students' unconscious relationship perceptions, although shyness appeared to be harmful to students' conscious relationship perceptions and the harm turned out to be even stronger in China than in the Netherlands (Chapter 4). As such, how shyness affects students' relationship perceptions across countries, may also depend on whether their perceptions are measured at a conscious level or an unconscious level. Hence, it may be relevant to include both students' conscious and unconscious perceptions when making cross-cultural comparisons of the impact of shyness on teacher-student relationship quality.

In **Chapter 8 (General Discussion)**, findings from previous chapters were integrated and discussed together. A primary message from this dissertation is that the quality of teacher-student relationships, as well as the associations between shyness and teacher-student relationships, can differ across the Netherlands and China. Therefore, caution is recommended when generalizing research findings and interventions based on one country to another. Second, cross-cultural differences in teacher-student relationship quality and in the associations between shyness and teacher-student relationship quality, seem to depend on the informants and measurement of the relationship quality. As teachers' perceptions, students' conscious perceptions, and students' unconscious perceptions of the relationship seem to provide unique information, future research and school practice are suggested to include multiple informants and instruments to measure relationship quality when making cross-cultural comparisons. Third, the investigated cross-cultural differences also seem to depend on the developmental stage of the students (i.e., early school years versus upper elementary school). Hence, researchers are recommended to take into account the educational stage when interpreting research findings and conducting future research that involves comparisons of teacher-student relationship quality across countries.

Samenvatting

Summary In Dutch



Samenvatting

Uit onderzoek blijkt dat de affectieve kwaliteit van leerkracht-leerlingrelaties (d.w.z. de emotionele band tussen leerkracht en leerling) belangrijk is voor het functioneren van leerlingen op school, bijvoorbeeld voor hun concentratie en gedrag op school en voor hun schoolresultaten. Leerkracht-leerlingrelaties met een hoge mate van nabijheid (d.w.z. warmte, open communicatie en ondersteuning) bieden leerlingen emotionele veiligheid om de schoolomgeving te verkennen en vormen een basis voor hun functioneren in de toekomst. Relaties met een hoge mate van conflict (d.w.z. negativiteit en onenigheid) of afhankelijkheid (d.w.z. bezitterig en aanhankelijk, claimend gedrag naar de leerkracht) veroorzaken daarentegen emotionele onveiligheid, waardoor leerlingen de schoolomgeving niet veilig kunnen verkennen en minder goed functioneren op school. De manier waarop leerlingen en leerkrachten de kwaliteit van leerkracht-leerlingrelaties ervaren, kan echter per land verschillen, vanwege culturele waarden (bijv. individualisme versus collectivisme). Zo wordt aangenomen dat leerkrachten en leerlingen in oosterse, collectivistische landen meer verbondenheid en afhankelijkheid en minder conflict ervaren in hun onderlinge relatie dan leerkrachten en leerlingen in westerse, individualistische landen.

Daarnaast spelen leerlingkenmerken, zoals verlegenheid, een belangrijke rol bij de ontwikkeling van goede leerkracht-leerlingrelaties. Deze rol kan ook per land verschillen. Zo wordt verlegenheid over het algemeen als ongewenst beschouwd in westerse, individualistische landen, maar juist gewaardeerd in oosterse, collectivistische landen. Verlegenheid heeft dus mogelijk een positievere invloed op de leerkracht-leerlingrelaties in oosterse, collectivistische landen dan in westerse, individualistische landen. Het doel van dit proefschrift was daarom om te onderzoeken of er een verschil was tussen Nederland (een Westers, individualistisch land) en China (een Oosters, collectivistisch land) in (1) de kwaliteit van leerkracht-leerlingrelaties en (2) het verband tussen verlegenheid en de kwaliteit van de leerkracht-leerlingrelatie. Omdat leerkrachten en leerlingen hun onderlinge relatie verschillend kunnen ervaren, hebben we zowel leerkracht- als leerlingpercepties van de relatiekwaliteit bekeken, gemeten met vragenlijsten. Voor leerlingen hebben we ook gekeken naar hun onbewuste perceptie van de relatie, gemeten met relatietekeningen. Omdat de kwaliteit van leerkracht-leerlingrelaties verandert naarmate leerlingen ouder worden, evenals de invloed van verlegenheid op relaties die kinderen met anderen aangaan, werden de twee onderzoeksvragen onderzocht in zowel de bovenbouw (groep 5 t/m 8) als de onderbouw

Samenvatting

van de basisschool (groep 2 en 3).

Hoofdstuk 2 en Hoofdstuk 3 waren gericht op het eerste onderzoeksdoel. In **Hoofdstuk 2** onderzochten we culturele verschillen in de relatie tussen leerkrachten en leerlingen in de bovenbouw (groep 5-8). De steekproef bestond uit 789 leerlingen en 35 leerkrachten in Nederland en 587 leerlingen en 14 leerkrachten in Zhejiang, China. Leerkrachten rapporteerden de kwaliteit van hun relatie met acht willekeurig geselecteerde leerlingen op de subschalen nabijheid, conflict en afhankelijkheid van de *Student-Teacher Relationship Scale* (STRS). Leerlingen beoordeelden hun relatie met de leerkracht op de subschalen nabijheid en conflict van de *Student Perception of Affective Relationship met Teacher Scale* (SPARTS). Bij een vergelijking van Nederland en China toonden zowel de STRS als de SPARTS voldoende meetinvariantie (d.w.z. *partially strong invariance*), waardoor het mogelijk was om de relatiepercepties tussen de landen te vergelijken. Multigroep modellen toonden aan dat Chinese leerlingen meer nabijheid en minder conflict met leerkrachten ervaarden dan Nederlandse leerlingen. De Chinese leerkrachten ervaarden ook minder conflict met leerlingen dan Nederlandse leerkrachten, maar de verbondenheid en afhankelijkheid die de leerkrachten ervaarden, verschilde niet per land. De overeenkomst tussen de leerkracht- en leerlingpercepties van de nabijheid was groter in China, terwijl de overeenkomst in conflict juist groter was in Nederland.

In **Hoofdstuk 3** bekeken we of er een verschil was tussen Nederland en in China in de kwaliteit van leerkracht-leerlingrelaties in de onderbouw (groep 2 en 3). De Nederlandse steekproef bestond uit 234 leerlingen en 35 leerkrachten. De Chinese steekproef bestond uit 190 leerlingen en 19 leerkrachten. De leerkrachtpercepties van de relatie werden gemeten met de subschalen nabijheid en conflict van de STRS (de subschaal afhankelijkheid was niet betrouwbaar in de Chinese steekproef). De leerlingpercepties van de relatie werden gemeten met de subschalen warmte en conflict van de *Young Children's Appraisals of Teacher Support* (Y-CATS), welke voldoende meetinvariantie toonden bij een vergelijking tussen Nederland en China. Multigroep modellen lieten zien dat Chinese leerlingen minder warmte en meer conflict met leerkrachten ervaarden dan Nederlandse leerlingen. Chinese en Nederlandse leerkrachten verschilden daarentegen niet in de ervaren mate van nabijheid en conflict met de leerlingen. In Nederland en China was er evenveel overeenkomst tussen de leerkracht- en leerlingpercepties van zowel nabijheid als conflict. Samen met de bevindingen uit Hoofdstuk 2 suggereren deze resultaten dus dat er een verschil kan zijn tussen landen in de kwaliteit van leerkracht-leerlingrelaties, overeenkomstig het *developmental systems model*. Culturele verschillen in de kwaliteit van de leerkracht-leerlingrelatie lijken af te hangen van wie de relatiekwaliteit rapporteerde, de leerkrachten of de leerlingen, en van de groep

waar de leerlingen in zitten (d.w.z. in de onderbouw of bovenbouw van de basisschool).

Hoofdstuk 4 en Hoofdstuk 5 zijn gericht op het tweede onderzoeksdoel. Hierin we onderzochten of er een verschil was tussen Nederland en China in het verband tussen verlegenheid en de kwaliteit van de leerkracht-leerlingrelatie. In **Hoofdstuk 4** werd onderzocht hoe verlegenheid samenhang met de kwaliteit van leerkracht-leerlingrelaties in de bovenbouw van de basisschool (groep 5 t/m 8). De steekproef en de meetinstrumenten voor de relatiekwaliteit waren hetzelfde als in Hoofdstuk 2. Leerlingen rapporteerden hoe verlegen ze zijn, op zeven items van de Schoolvragenlijst (SVL), waarvoor voldoende meetinvariantie werd gevonden bij vergelijking van de Nederlandse en Chinese steekproef. Resultaten van multilevel regressieanalyses toonden aan dat verlegen leerlingen minder nabijheid en meer conflict ervaarden, in beide landen. In China waren deze verbanden sterker dan in Nederland; dit werd niet verwacht. Er was ook een negatieve verband tussen verlegenheid en de nabijheid die de leerkrachten rapporteerden. Dit verband was in China en Nederland even sterk. Het verband tussen verlegenheid en het conflict dat leerkrachten rapporteerden, was zowel in Nederland als in China niet significant. Kortom, in Nederland en China leek verlegenheid even schadelijk voor de kwaliteit van leerkracht-leerlingrelaties zoals die door *leerkrachten* werd ervaren, maar in China leek verlegenheid schadelijker dan in Nederland voor de kwaliteit van leerkracht-leerlingrelaties zoals die door *leerlingen* werd ervaren. Een mogelijke verklaring hiervoor is dat de waardering die er in China voor verlegenheid was, in de afgelopen decennia is afgenomen onder invloed van globalisering en het westen. Het helpen van verlegen leerlingen bij het opbouwen van een goede relatie met hun leerkracht, lijkt in China daarom nog belangrijker dan in Nederland.

In **Hoofdstuk 5** hebben we gekeken naar het verband tussen sociale inhibitie (vergelijkbaar met verlegenheid) en de kwaliteit van de leerkracht-leerlingrelatie in de onderbouw (groep 2 en 3). Voor deze studie selecteerden we een deel van de steekproef uit Hoofdstuk 3, namelijk de leerlingen voor wie de leerkrachten de sociale inhibitie hadden gerapporteerd. Dit resulteerde in een steekproef van 35 leerkrachten en 201 leerlingen in Nederland, en 19 leerkrachten en 152 leerlingen in China. Leerkrachten rapporteerden de mate van sociale inhibitie van de leerling op de *Social Inhibition subscale from the Behavior Questionnaire for Two- to Sixth-Year-Olds-Modified* (BQTSYO-M). Voor deze subschaal werd voldoende meetinvariantie gevonden, d.w.z. *partially strong invariance*, bij een vergelijking van de Nederlandse en Chinese steekproef. Net als in Hoofdstuk 3 werden de leerkrachtpercepties van de relatie gemeten met de STRS. *Multilevel linear models* toonden aan dat sociale inhibitie samenhang met minder nabijheid tussen de leerkracht en de leerling en dat deze samenhang in Nederland en in China even sterk was.

Samenvatting

In Nederland hing sociale inhibitie daarnaast samen met minder conflict, maar dit werd niet gevonden in China; dit was onverwacht. Deze bevindingen suggereren dus dat, zelfs voor jonge Chinese leerlingen (groep 2 en 3), verlegenheid schadelijk kan zijn voor de mate van nabijheid in leerkracht-leerlingrelaties en dat deze schade in China en in Nederland even groot is.

De bovengenoemde hoofdstukken richtten zich op de leerkracht- en leerlingpercepties van de relatie zoals gemeten door middel van relatievragenlijsten. In Hoofdstuk 6 en 7 gebruikten we relatietekeningen, *Student-Teacher Relationship Drawings* (STRDs), om de onbewuste leerlingpercepties van de leerkracht-leerlingrelatie te onderzoeken in de bovenbouw (groep 5 t/m 8). In **Hoofdstuk 6** onderzochten we de psychometrische eigenschappen van de relatietekeningen in Nederland en China. Voor deze studie werd een deel van de steekproef uit Hoofdstuk 2 geselecteerd, namelijk de leerlingen die een relatietekening hadden afgemaakt. Deze steekproef bestond uit 752 kinderen in Nederland en 574 kinderen in China uit groep 5 tot 8. Hun tekeningen werden gecodeerd door twee onafhankelijke beoordelaars op acht dimensies, waaronder twee positieve dimensies (trots/blijdschap, vitaliteit/creativiteit) en zes negatieve dimensies (boosheid/spanning, omgekeerde rolomkering, eigenaardigheid/dissociatie, emotionele afstand/isolatie, kwetsbaarheid en globale pathologie). *Intraclass correlations* (ICCs) toonden aan dat de interbeoordelaarsbetrouwbaarheid voldoende tot hoog was, zowel voor de Nederlandse steekproef ($.68 < ICC < .84$) als de Chinese steekproef ($.72 < ICC < .85$). In multigroep modellen werd een vergelijking gemaakt tussen de Nederlandse en Chinese steekproef op de dimensies van de relatietekeningen, waarbij er voldoende meetinvariantie, d.w.z. *partially strong invariance*, bleek te zijn. In beide landen bleken de *onbewuste* leerlingpercepties van de relatie een gemiddelde samenhang te hebben met de *gerapporteerde* leerlingpercepties ($-.32 < r < .29$) en met hun schoolbetrokkenheid ($.21 < r < .23$). Deze bevindingen lijken dus te suggereren dat relatietekeningen zowel in Nederland als in China beschouwd kunnen worden als een betrouwbare en valide maat voor de onbewuste leerlingpercepties van leerkracht-leerlingrelaties, en dat deze kunnen worden gebruikt om culturele vergelijkingen te maken.

Nadat de psychometrische kwaliteit van de relatietekeningen werd ondersteund, onderzochten we in **Hoofdstuk 7** of er culturele verschillen werden gevonden in de onbewuste leerlingpercepties van de leerkracht-leerlingrelatie, zoals gemeten door de relatietekeningen (doel 1). Daarnaast onderzochten we er een verschil was tussen landen in de samenhang tussen verlegenheid en de onbewuste leerlingpercepties van de relatie (doel 2). Hiervoor werden gegevens gebruikt van dezelfde steekproef als in Hoofdstuk 6. Wat betreft het eerste onderzoeksdoel, lieten multigroep modellen zien dat Chinese en

Nederlandse leerlingen niet verschillen op de positieve dimensies van de relatietekeningen (trots/blijdschap en vitaliteit/creativiteit). Op de negatieve dimensies, toonden de relatietekeningen van Chinese leerlingen een lagere mate van boosheid/spanning, omgekeerde rolomkering, emotionele afstand/isolatie en globale pathologie dan tekeningen van Nederlandse leerlingen. Het was interessant dat tekeningen van Chinese leerlingen meer kwetsbaarheid toonden, een negatieve dimensie van de relatietekeningen, dan tekeningen van Nederlandse leerlingen. Deze resultaten laten zien dat, overeenkomstig de bevindingen van de *gerapporteerde* leerlingpercepties (hoofdstuk 2), Chinese leerlingen ook in hun *onbewuste* percepties minder relationele negativiteit ervaarden dan Nederlandse leerlingen. Daarentegen waren de bevindingen van de positieve dimensies en van de dimensie kwetsbaarheid, juist in tegenspraak met de bevindingen van de *gerapporteerde* leerlingpercepties (Hoofdstuk 2). Culturele verschillen in de leerlingpercepties van de leerkracht-leerlingrelatie kunnen dus afhangen van welke percepties gemeten zijn: de *gerapporteerde* of de *onbewuste* leerlingpercepties.

Wat betreft het tweede onderzoeksdoel, was er zowel in de Nederlandse als in de Chinese steekproef, geen significante samenhang tussen verlegenheid en de *onbewuste* leerlingperceptie van de leerkracht-leerlingrelatie; dit werd niet verwacht. Verlegenheid is dus mogelijk niet schadelijk voor de *onbewuste* leerlingpercepties van de relatie, maar wel voor de *gerapporteerde* leerlingpercepties en deze schade bleek in China nog groter te zijn dan in Nederland (Hoofdstuk 4). Hoe verlegenheid de leerlingpercepties van de relatie in verschillende landen beïnvloedt, kan dus ook afhangen van of de *gerapporteerde* of *onbewuste* leerlingpercepties zijn gemeten. Daarom kan het relevant zijn om beide te meten, wanneer de invloed van verlegenheid op de kwaliteit van de leerkracht-leerlingrelatie wordt vergeleken tussen culturen.

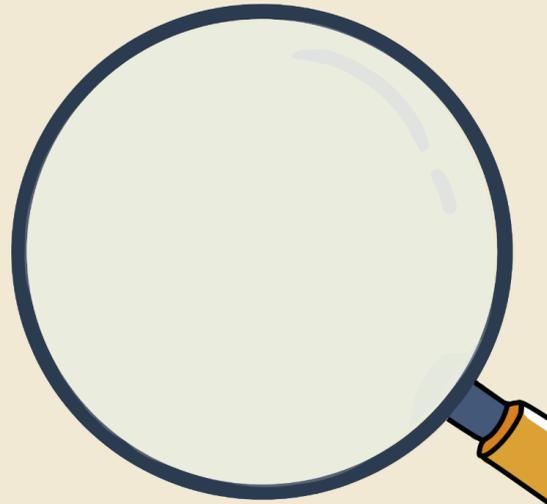
In **Hoofdstuk 8 (General Discussion)** werden de bevindingen uit alle eerdere hoofdstukken samengenomen en besproken. De belangrijkste boodschap van dit proefschrift is dat er een verschil kan zijn tussen Nederland en China in de kwaliteit van de leerkracht-leerlingrelaties en in het verband tussen verlegenheid en leerkracht-leerlingrelaties. Daarom kunnen onderzoeksresultaten en interventies niet zomaar gegeneraliseerd worden van het ene naar het andere land. Ten tweede lijken culturele verschillen in de kwaliteit van leerkracht-leerlingrelaties en in het verband tussen verlegenheid en de kwaliteit van leerkracht-leerlingrelaties, af te hangen van de informanten en het meetinstrument van de relatiekwaliteit. Omdat leerkrachtpercepties, *gerapporteerde* leerlingpercepties en *onbewuste* leerlingpercepties van de relatie ieder een unieke bron van informatie zijn, zou in toekomstig onderzoek en in de praktijk gebruik moeten worden gemaakt van meerdere informanten en instrumenten bij het meten van de

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relatiekwaliteit en het vergelijken van culturen. Ten derde lijken de gevonden culturele verschillen afhankelijk te zijn van de groep waar de leerlingen in zitten (d.w.z. onderbouw of bovenbouw van de basisschool). Daarom raad ik onderzoekers aan om rekening te houden met de groep, wanneer ze onderzoeksresultaten interpreteren en in toekomstig onderzoek een vergelijking maken tussen de kwaliteit van de leerkracht-leerlingrelatie in verschillende landen.



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About the Author

Mengdi Chen was born on September 24th, 1994 in Zhejiang province, China. She finished her bachelor study at Zhejiang University and received a bachelor's degree of Education in Pedagogy with distinction in 2016. Her bachelor thesis focused on elementary students' sleep quality and school engagement, under the supervision of prof. Qinmei Xu. After finishing this bachelor, Mengdi started her research master study at the University of Amsterdam in 2016. She graduated with a research master's degree in Child Development and Education (Cum Laude) in 2018. During her research master's study, Mengdi grew her research interest in teacher-student relationships. Supervised by dr. Debora Roorda, Mengdi wrote a research master thesis focusing on cross-cultural differences in the quality of relationships between teachers and upper elementary students in the Netherlands and China.

After completing her research master's study, Mengdi was granted a scholarship provided by the China Scholarship Council (CSC) and the University of Amsterdam, to pursue a PhD degree at the Research Institute of Child Development and Education. In September 2018, she started working on her PhD project, under the supervision of dr. Helma Koomen and dr. Debora Roorda. This project aimed to investigate cross-cultural differences in teacher-student relationship quality and associations with shyness between the Netherlands and China. Based on this project, Mengdi has finished the current dissertation in 2022.

List of Publications

Journal Publications

- Chen, M., Zee, M., & Roorda, D. L.** (2021). Assessing student–teacher relationship quality in cross-cultural contexts: Psychometric properties of student–teacher relationship drawings. *European Journal of Developmental Psychology*, 1-15. doi:10.1080/17405629.2021.1952862
- Chen, M., Zee, M., & Roorda, D. L.** (2021). Students' shyness and affective teacher-student relationships in upper elementary schools: A cross-cultural comparison. *Learning and Individual Differences*, 86. 1-10. doi: 10.1016/j.lindif.2021.101979
- Chen, M., Zee, M., Koomen, H.M.Y., Roorda, D. L.** (2019). Understanding cross-cultural differences in affective teacher-student relationships: A comparison between Dutch and Chinese elementary school teachers and students. *Journal of School Psychology*, 76, 89-106. doi: 10.1016/j.jsp.2019.07.011
- Chen, M., Koomen, H.M.Y., & Roorda, D. L.** (2022). Young Children's and Teachers' Perceptions of Affective Teacher-Child Relationships: A Cross-Cultural Comparison between the Netherlands and China. Manuscript submitted to journal, under review. (Presented at the ISSBD 2022 conference)
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- Chen, M., Zee, M., & Roorda, D. L.** (2022). Drawings tell the difference: Student characteristics and student–teacher relationship in a cross-cultural context. Manuscript submitted to journal, under review. ((Presented at the EARLY 2021 conference)
- Chen, M., Xu., Q., & Cui., M.** (2021). Sleep problems, attention, and classroom learning behaviors of Chinese elementary school children: The moderating role of gender. *School Psychology International*, 1-17. doi: 10.1177/0143034321993502
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- Roorda, D. L., **Chen, M.**, & Zee, M. (2021). Affective student–teacher relationships and students' engagement: A Cross–Cultural Comparison of China and the Netherlands. In *Effective Teaching Around the World - Theoretical, Empirical, Methodological and Practical Insights*. In Press.
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