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RESEARCH ARTICLE

PROFESSIONAL IDENTITY

Interprofessional identity and motivation towards interprofessional collaboration

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Abstract

Introduction: It is unknown whether interprofessional identity is able to explain interprofessional behaviours. Extended professional identity theory provides clues by combining two psychological identity approaches. The aim of this study is to investigate whether interprofessional identity is a source for intrinsic motivation towards interprofessional collaboration related to wider group membership.

Methods: Participants of this double-blinded study were 47 dentistry and 41 dental hygiene students (86.3% response) without interprofessional education (IPE) experience. Group productivity was used as indicator of group effort and equal communication as indication for interprofessional direction. The extended professional identity scale (EPIS) was used to measure interprofessional identity eight weeks prior to a mandatory IPE course. Based on EPIS levels, students were assigned to a low or high interprofessional identity group condition. Subsequently, 12 interprofessional teams (four to five members) were randomly composed per condition. Each group received eight problems (regarding roles, responsibilities and collaborative practice) for which they were expected to provide up to 10 solutions. Six trained psychologists rated the validity of solutions after which the percentage of solutions per group was calculated. Additionally, the psychologists rated interprofessional direction by observing team communication (asking questions, topic control, prosocial formulations, and speech frequency) during the second group meeting.

Results: No interprofessional identity differences were found with regard to gender and profession. The mean difference between groups with low versus high interprofessional identity was 0.5 ($M = 3.4$; $SD = 0.5$ and $M = 3.9$, $SD = 0.4$, respectively), $t = -5.880$, $p < 0.001$. Groups with high identity generated more solutions compared to low identity groups (91.5% vs. 86.4%), $t = -2938$, $p = 0.004$. The correlation between individual interprofessional identity and group effort was significant, $r = 0.22$, $p = 0.036$. Groups with high identity showed more interprofessional direction, $t = -2.160$, $p = 0.034$.

Discussion: Interprofessional identity has a positive effect on congruent interprofessional behaviours after 10 weeks. More research is required to understand interprofessional identity in relation to performance in education and work.

1 | INTRODUCTION

Hierarchy between professions and turf protection can hamper productivity[1] and even jeopardise patient safety.[2] When learning in a work context, professional identity and social categorisation both add complexity to feedback acceptance and incorporation in interprofessional teams.[3] Status and power differences can already be visible at the undergraduate level. For example, hierarchical differences can exist between medical and nursing students[4] and between dental and dental hygiene students.[5] Several studies show hierarchical differences between these professions.[6–8] Such differences can affect the performance of individual team members. Individuals are more likely to speak up by admitting mistakes and uncertainty and seeking advice when they experience psychological safety.[9] This psychological safety has been associated with decreased power distance and improved perceptions of team dynamics.[10] Interprofessional education (IPE) can change hierarchical communication patterns between students. IPE 'occurs when students from two or more professions learn about, from, and with each other'.[11] Team communication among dental and dental hygiene students during a first acquaintance can be unequal.[5] Dental students are more inclined to take their turn, express more dominance and contribute more ideas compared to dental hygiene students. When interprofessional socialisation (social contact between both professions with interprofessional goals) is not facilitated, this unequal communication within mixed profession teams gets worse. When interprofessional socialisation is enhanced by emphasising interprofessional goals, enabling social comparison and facilitating a relative frequent social contact between members of different professions, then communication will improve. Unequal communication between different professional groups can be explained by the in-group out-group mechanism described by the social identity theory.[12] An in-group is a social group to which an individual identifies as being a member, while this is not the case for an out-group. In-group out-group differences are displayed as collaborative behaviours within the in-group versus social distancing between in-group and out-group. Based on this mechanism, social identities can have a large impact on team performance. A social identity is 'part of an individual's self-concept which derives from his [or her] knowledge of his [or her] membership of a social group (or groups) together with the value and emotional significance attached to that membership'.[13] Every individual has multiple social identities of which most are work related.[14] All social identities are formed and negotiated by socialisation within the relevant identity group and related context. Socialisation even starts before becoming a group member when anticipating future membership. Therefore, identity formation by professional socialisation begins before entering the profession of choice[15] and beyond.[16] The socialisation context contains triggers that will activate the related identity in future occasions. A social identity can be a completely new social construct, which, at the same time, will feel psychologically real to an individual. When contextual triggers activate the relevant social identity, congruent behaviours will be displayed.[17,18] Since a self-concept is intrinsic and identity is associated with corresponding behaviours, the relationship between identity and congruent behaviours is considered an intrinsic motivation. One social identity can be more important to an individual compared to one of his (or her) other social identities. This is referred to as 'identity hierarchy'.[19] When an individual is confronted with a context with multiple triggers that activate more than one social identity, he or she might have to choose between these social identities when they are not complementary. If not complementary, the social identity most important to the individual will determine how he or she will act. The switch between these intrapersonal social identities will also lead to a change in behaviour because of identity-behaviour congruence.[17] This identity switch is referred to as 'identity mobility'.[20–22] The dimensionality of the social identity of any identity group is based on the definition of Tajfel,[13] seems universal and was confirmed in several very different groups.[23,24] These dimensions always concern a sense of belonging, an affective relationship with the in-group and cognitions related to in-group membership. The reference or identity group to which a particular social identity applies has a distinct sense of purpose that is related to corresponding goals and a specific group or social category. The degree of identification of an individual with a particular group will determine the degree to which this individual will display behaviours related to the frame of reference of that group membership. For example, a team identity is related to a team (a number of individuals working together to achieve a common goal). However, members of a football team will display other kind of behaviours compared to a clinical team. Even the team identity between football teams can vary because separate social groups create different joint values and customs through their socialisation. The same is true for differences between professions. Mutual role expectations and occupational stereotypes among students are sustained or can even be strengthened by professional socialisation.[25] The nature of self-defining and goal-related cognitions of an individual professional identity will vary depending on whether someone is, for example, a physician, a dentist or a pharmacist.

When social identity is shared by members of different professions belonging to the same team, their performance will be higher compared to teams with a lower team identification.[26] However, many health care providers work in temporary mixed profession teams or networks[27] complicating the formation of team identity and consequently reducing team performance. Yet, this problem can be overcome when the individual also identifies with a wider group consisting of more various functionally related professions.[28] This membership can be defined or perceived as 'interprofessional'. Interprofessional identity is part of an individual's self-concept that is derived from his (or her) knowledge of his (or her) membership of a wider interprofessional group membership together with the value and emotional significance attached to that membership. This direction is related to interprofessional collaboration and '… happens when multiple health workers from different professional backgrounds work together with patients, families, carers and communities to deliver the highest quality of care across settings'.[11]

1.1 | Extended professional identity theory: An interprofessional identity theory

The extended professional identity theory (EPIT) combines the two identity approaches of psychology: identity theory and social identity theory.[5,18,29] The first approach is related to intrapersonal multiple identities and their interaction as related to identity hierarchy, identity mobility, identity salience (activation by contextual triggers) and subordinate-superordinate relationships between social identities. The second approach is related to intergroup processes consisting of interpersonal contact between members of different groups. According to EPIT, two particular social identities are associated without being part of the same construct: professional identity and interprofessional identity. Three types of relationships between social identities are likely: weakly associated, competitive or complementary. First, a low professional identity is likely to limit interprofessional identity formation since being member of a particular professional group is inherent to interprofessional collaboration. Second, a high professional identity without pro-interprofessional beliefs, opposing beliefs or isolated self-positioning, is likely to limit interprofessional identity formation. Third, a high professional identity with beliefs based on pro-interprofessional positioning is likely to enable interprofessional identity formation. Once an interprofessional identity is formed, it should predict congruent behaviours. According to the intergroup contact theory,[30] positive attitudes towards other professions and interprofessional collaboration can be enhanced by active acquaintance but cannot guarantee a shared identification. An important drive of every individual to identify with a group (like a profession) is the need for positive self-enhancement.[31] Therefore, when positive evaluations (positive attitudes) of a particular profession are emphasised in an interprofessional context, it is likely to enhance pro-interprofessional positioning. In turn, this can enable interprofessional identity formation. According to EPIT, an interprofessional identity is a superordinate social identity related to a wider group membership activated by a combination of contextual triggers. These triggers can separately activate different professional identities depending on the relevance of a trigger. Individuals can learn to recognise identity triggers of other professions that, combined with an identity trigger relevant to the own profession, can form a superordinate trigger that activates his or her interprofessional identity. Even though professional identity and interprofessional identity influence each other, they are distinctive because each applies to different group memberships and different group goals. This is why a 'physician identity' is not a 'dentist identity' and why a 'professional group' is not the same as an 'interprofessional group' (Figure 1).

Interprofessional identity should be a three-dimensional construct just like any other social identity.[23,24] This is why, according to EPIT, an interprofessional identity consists of three dimensions in line with scientific literature on social identity: interprofessional belonging, interprofessional commitment and interprofessional beliefs.[5,13,23,24,29,32,33] The first dimension is related to social inclusiveness of one's own profession as member of a wider interprofessional group and should be associated with the willingness to get to know other professions. The second dimension is related to positive feelings towards long-term collaboration with other professions and should determine the degree of effort to which an individual wants to collaborate with members of other professions. The third and final dimension is related to goal-directed perceptions towards interprofessional collaboration and should lead to a display of behaviours congruent with these identity beliefs. Interprofessional identity based on EPIT can be measured by the extended professional identity scale (EPIS). The reliability and construct validity of this measurement instrument has been confirmed by Dutch and Lithuanian studies.[32,33] Interprofessional identities of a group of individuals should jointly determine the outcome of mutual collaboration separate from their identification with a particular team or network. A recent study on EPIT-based interprofessional identity in practice shows that interprofessional identity formation can be facilitated.[34] It also reports an association between interprofessional identity, interprofessional collaboration and improved outcomes like a decrease of inpatient days. This is an indication that interprofessional identity seems to be associated with interprofessional collaboration.

1.2 | Identity as a source of intrinsic motivation

On the basis of identity-behaviour congruence, we attribute a particular identity based on our observations of someone's behaviour.[17] Behaviour is not the same as identity because it is not part of the self-concept. Identity generates intrinsic motivation for congruent behaviours according to the knowledge about one's group membership together with the value and emotional significance attached to that membership. Motivation can be defined as 'the process that accounts for an individual's intensity, direction and persistence of effort toward attaining a desired goal'.[35] When all other factors are equal (same environment and level of competence), a high motivation is related to more effort, and more effort becomes visible in doing more work. The direction of motivation determines the nature of displayed behaviours.[36,37] Therefore, interprofessional identity is conjectured to predict more effort towards group work by producing more group output independent of team membership and prior IPE. Also, it should be associated with mutual information exchange between (future) members of different professions inherent to interprofessional collaboration. So far, it has not been investigated whether interprofessional identity is related to intrinsic motivation towards interprofessional collaboration and, therefore, positively associated with group effort and a behavioural direction towards interprofessional social interactions. The aim of this study is to investigate whether interprofessional identity is a source of intrinsic motivation towards interprofessional collaboration related to a wider group membership.

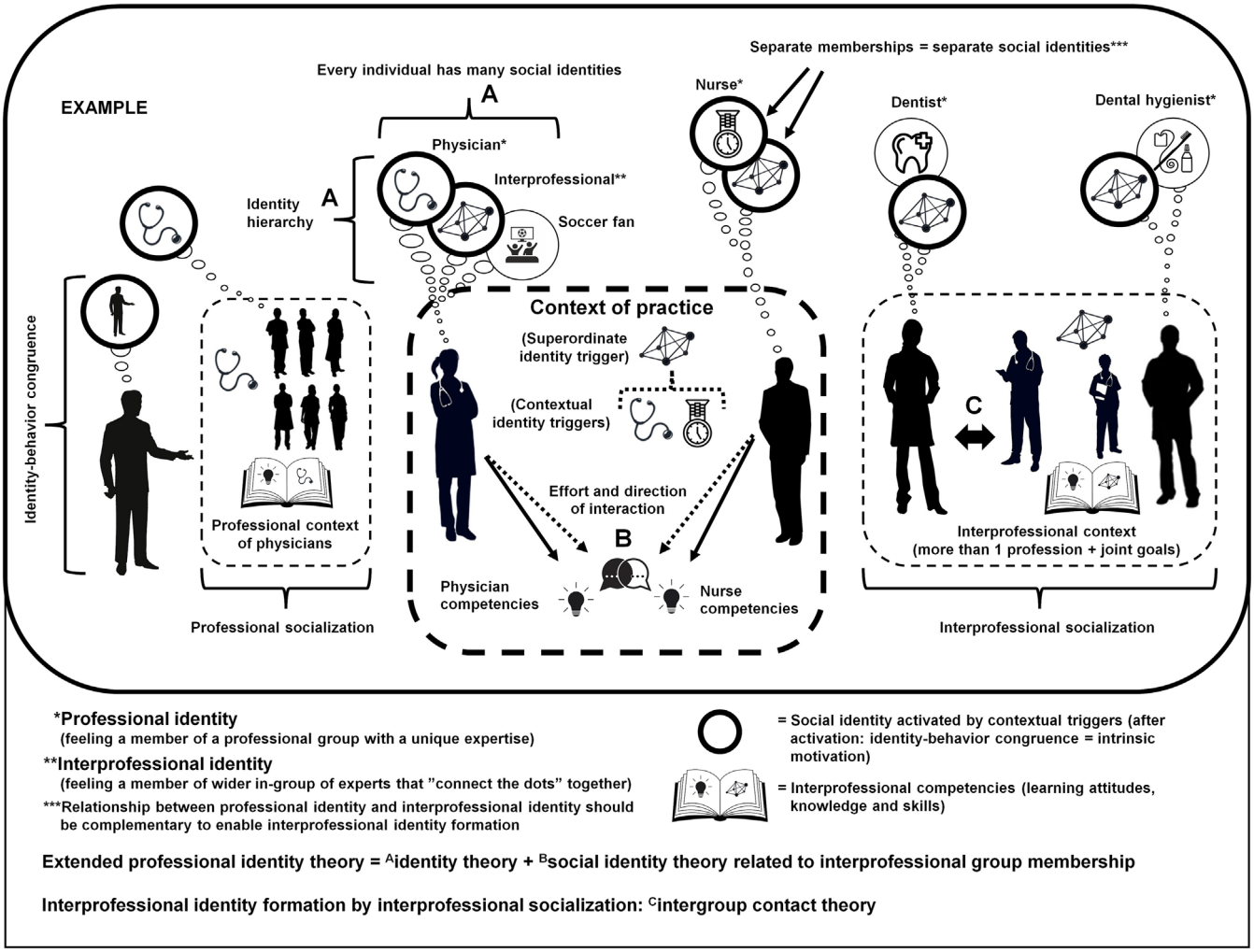

FIGURE 1 Interprofessional identity versus professional identities according to extended professional identity theory: an infographic. [Color figure can be viewed at wileyonlinelibrary.com]

2 | METHODS

2.1 | Study design

The context of this study was a first-time mandatory IPE course for third-year dental bachelor and second-year dental hygiene students. The course is based on a psychological approach of identity formation (EPIT) that is closely related to the social constructivist pedagogy: three essential EPIT-based characteristics of the IPE course where explicit interprofessional goals, social comparison between mixed profession groups and a relative frequent social contact between members of different professions. The contact frequency consisted of three meetings as a minimum based on the developmental sequence of small groups.[38] The course finished with a plenary debriefing. During this debriefing, implicit learning outcomes were presented on the basis of EPIS. In addition, examples of the quality of different solutions were evaluated by experts of both professions during a lecture.

This study was a two group double-blinded pretest-only design with productivity rating and video observation (Figure 2). Interprofessional identity was measured 8 weeks prior to this online IPE course as part of enrolment. Two groups were formed on the basis of the condition 50% lowest or 50% highest interprofessional identities. Thereafter, 12 interprofessional teams (four to five members) were randomly composed per condition. All groups received eight problems (questions regarding roles, responsibilities and collaborative practice) and could autonomously determine scheduling of three group meetings within a predefined time span of 2 weeks (self-organisation). Six trained psychologists observed video recordings of these meetings and rated equal communication. A rotational schedule was used to ensure validity assessment of team output, and observations were performed by different people. The IPE-course ended with a plenary debriefing.

2.2 | Participants

In total, 102 students participated with no prior experience with IPE and halfway through their bachelor training. In the Netherlands, dentistry training consists of an undergraduate (3-year bachelor) and

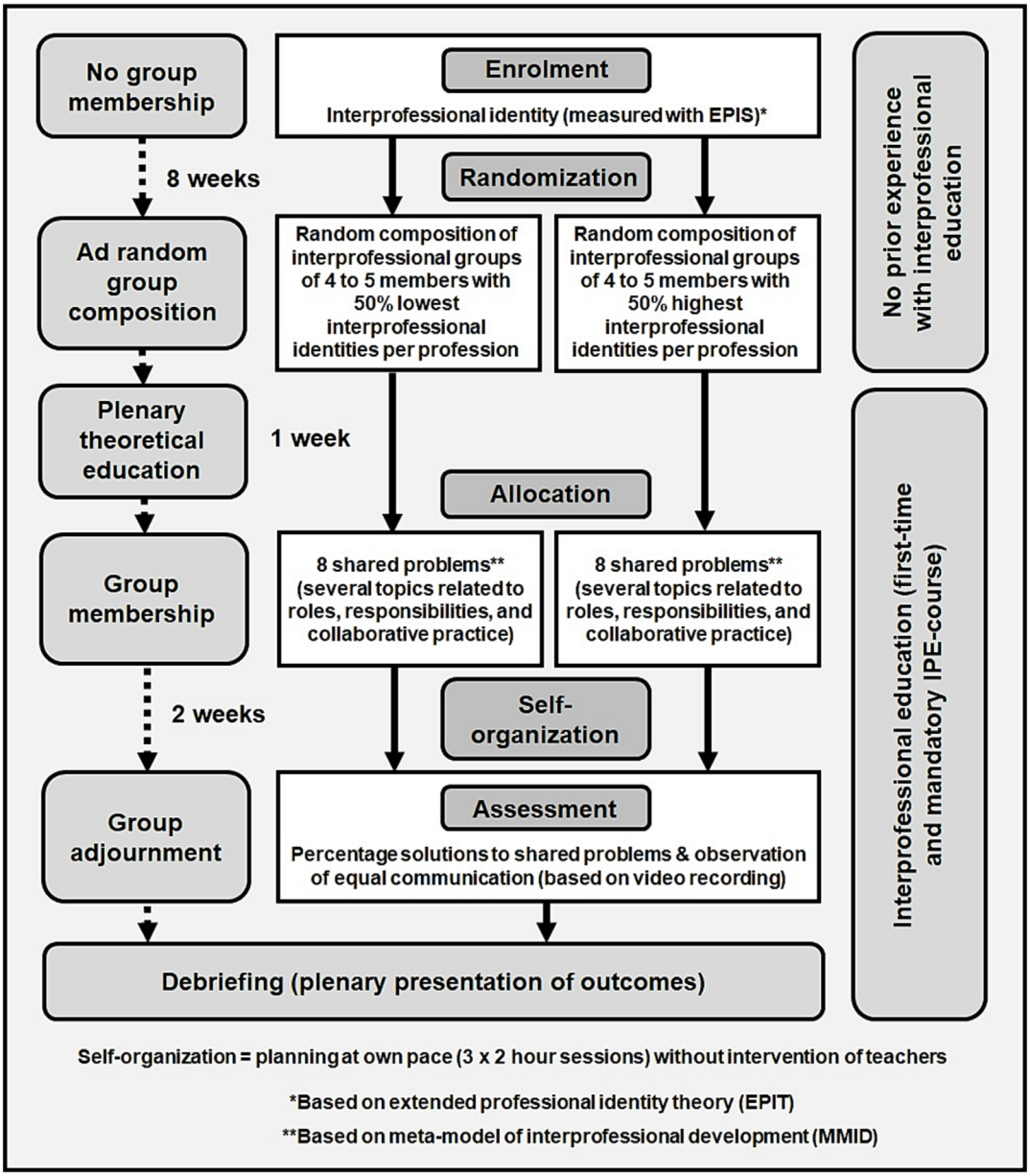

FIGURE 2 Study design. [Color figure can be viewed at wileyonlinelibrary.com]

graduate (3-year master) programme. Dental hygiene only consists of an undergraduate (4-year bachelor) programme. These participants consisted of 55 (53.9%) dentistry and 47 (46.1%) dental hygiene students. Gender distribution was different between professions (n = 42 women and 76.4% vs. n = 45 women and 95.7% respectively; $Chi^2 = 7.589$, p = 0.006). The age of both professions was also different (M = 22.7 years, SD = 3.2 vs. M = 21.1 years, SD = 1.8 respectively; $t = 3.070$, p = 0.003).

2.3 | Data collection

Group productivity was used as an indication of group effort and equal communication as an indication of interprofessional direction.

2.3.1 | Interprofessional identity

Interprofessional identity was measured by the 12-item EPIS consisting of three subscales: interprofessional belonging, interprofessional commitment and interprofessional beliefs.[32] Some example items of EPIS are 'I like meeting and getting to know people from other health professions' (interprofessional belonging), 'I would be very happy to spend the rest of my career with an interprofessional team' (interprofessional commitment) and 'Joint clinical decision-making should be an important part of interprofessional collaboration' (interprofessional beliefs). Internal consistency of subscales is 0.79, 0.81 and 0.80, respectively, and 0.89 of the overall scale of the original EPIS. The response format consists of a 5-point Likert scale (1 = *strongly disagree* to 5 = *strongly agree*).

2.3.2 | Group effort

Group effort was measured by group productivity operationalised by the number of valid solutions provided.[39] After this, a percentage was calculated (80 solutions = 100%). A problem was defined as a situation, person or thing that needs attention and needs to be dealt with or solved. A minimum of six solutions was sufficient with a maximum of 10 solutions. Each group received eight shared problems, for example, jointly exploring profession-based strengths and weaknesses and jointly setting up an interprofessional team practice. These problems were based on priorities described by the meta-model of interprofessional development.[29,40] This meta-model is a sociotechnical systems approach to interprofessional collaboration. It combines different theories and evidence to determine a sequence of priorities for practice, education and research. These priorities include social identification, shared problem detection, generation and combination of solutions, joint planning, joint plan execution and environmental conditions to sustain interprofessional collaboration. The presented shared problems concerned several topics related to roles, responsibilities and collaborative practice.

2.3.3 | Interprofessional direction

Interprofessional direction was measured by analysing equal communication between members of different professions within a mixed profession group. Each group meeting was recorded and observed by a psychologist. Their observations of equal communication were determined according to the following criteria: (1) asking questions, (2) topic control, (3) prosocial formulations and (4) speech frequency.[5,41–46] Relative frequency of each item was rated on a 5-point Likert scale: 1 = *no one does this*; 2 = *one group member does this more often*; 3 = *two group members do this more often*; 4 = *three group members do this more often*; and 5 = *more than three group members do this more often*. Higher scores indicate more group members are more mutually interactive, representing more equal communication and, thus, more interprofessional direction.

2.4 | Data analyses

Internal consistency of EPIS was checked by Cronbach's alpha being larger than 0.70.[47,48] Correlations between individual interprofessional identity with group effort and interprofessional orientation were calculated. Mean differences between groups on effort and interprofessional direction were analysed with the independent two sample *t* test. Effect size was calculated, and 0.20 was considered small, 0.50 medium and 0.80 large.[49] Glass's Delta was calculated to analyse the statistical power and considered to be satisfactory if higher than 0.80.[50] A significance level of 0.05 was applied throughout the study.

3 | RESULTS

Of 102 IPE participants, 88 students (86.3% response) consented for using their individual EPIS test scores for publication. The participants consisted of 47 dentistry and 41 dental hygiene students. The majority of respondents was female ($n = 76$; 86.4%). No differences on interprofessional identity were found between response and non-response groups, $t = 0.234$, $p = 0.816$. The Cronbach's alpha was 0.87, 0.82 and 0.78, respectively, and 0.88 of the overall scale. No differences on interprofessional identity were found between gender ($t = 0.751$, $p = 0.455$) or profession ($t = -0.609$, 0.544). Age was not correlated with interprofessional identity ($r = 0.063$, $p = 0.559$). The mean difference between groups with low versus high interprofessional identity was 0.5 ($M = 3.4$; $SD = 0.5$ and $M = 3.9$, $SD = 0.4$, respectively; $t = -5.880$, $p < 0.001$).

3.1 | Group effort

The mean percentage of problem solutions reported for all eight problems was 89.3% ($SD = 8.3\%$) with a minimum found of 70.0% and a maximum of 100% over all 24 groups independent of group condition. Groups with a high mean interprofessional identity showed more effort compared to group with a low mean interprofessional identity, $t = -2.938$, $p = 0.004$ (Figure 3), with post hoc power 0.94 and effect size 0.54. This can analogously be expressed as a difference in effort of 5.1% (91.5% vs. 86.4%, respectively). The correlation between individual interprofessional identity and group effort was significant, $r = 0.22$, $p = 0.036$.

3.2 | Interprofessional direction

The mean interprofessional direction across groups was 4.1 ($SD = 0.6$). The groups high on interprofessional identity showed more interprofessional direction compared to the low identity groups, $t = -2.160$, $p = 0.034$ (Figure 4), with post hoc power 0.93 and effect size 0.52. The correlation of interprofessional identity at individual level is positively associated with interprofessional direction, $r = 0.35$, $p = 0.001$.

4 | DISCUSSION

In this study, interprofessional identity was investigated to determine whether it can function as a source for intrinsic motivation towards interprofessional collaboration related to a wider group membership independent of team membership and prior experience with IPE. Our findings show that interprofessional identity is associated with congruent behaviours after 10 weeks. This study provides evidence that interprofessional identity partially determines interprofessional group efforts.

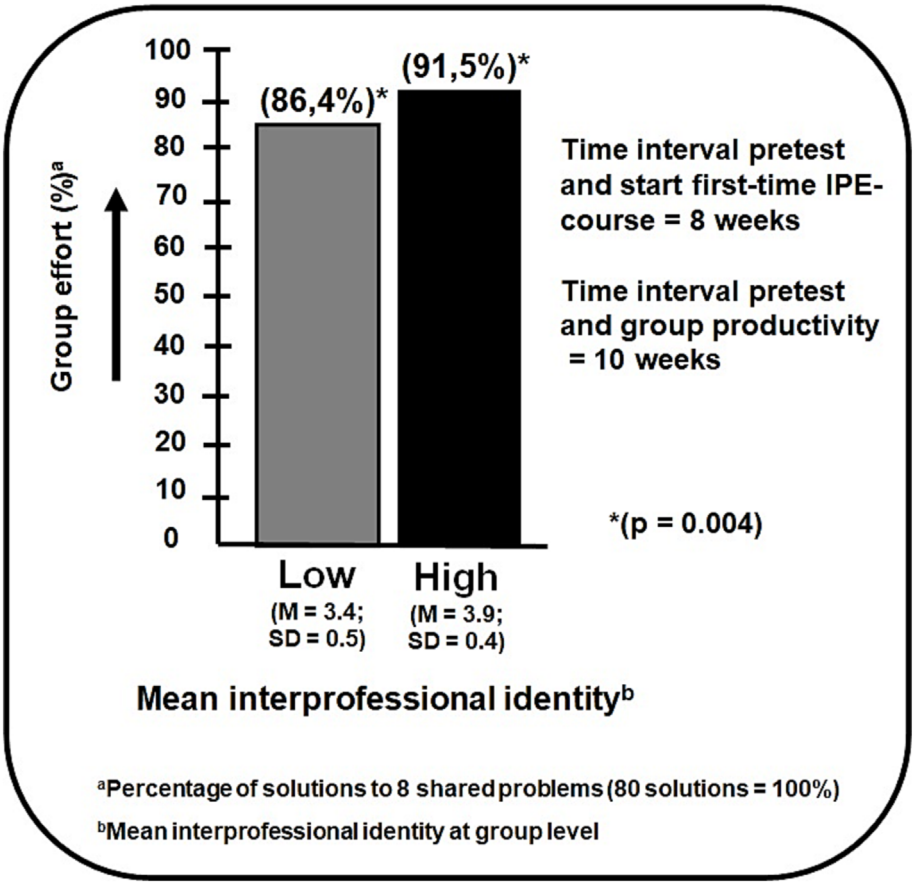

FIGURE 3 Group effort of groups with a low mean versus a high mean interprofessional identity ($n = 102$). [Color figure can be viewed at wileyonlinelibrary.com]

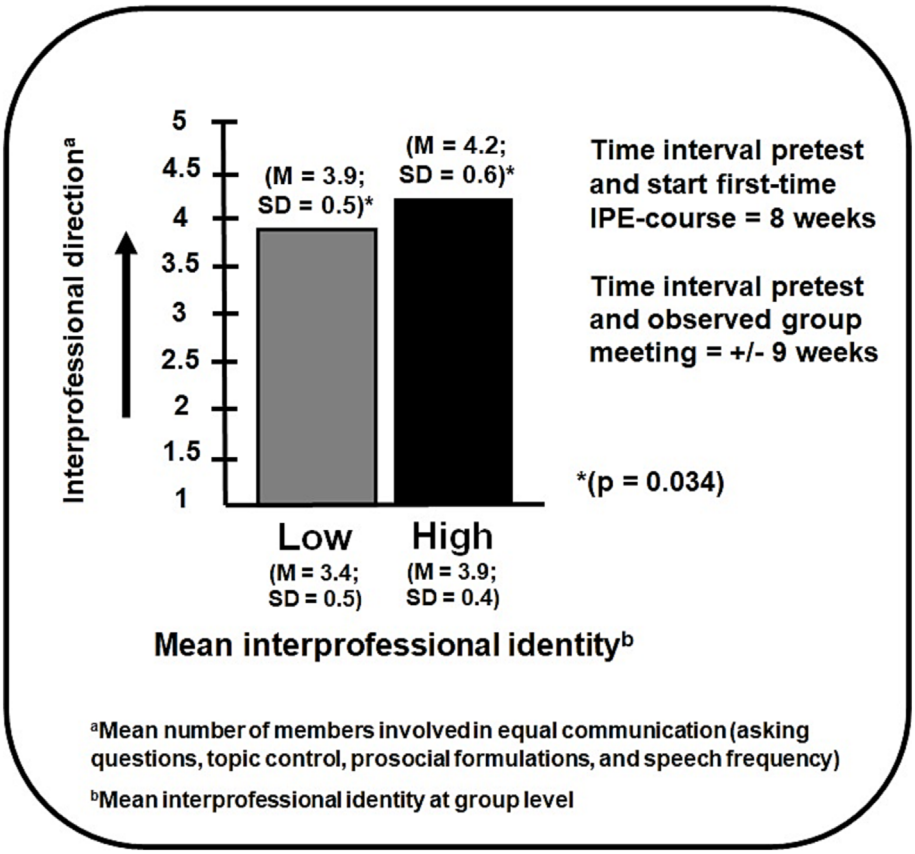

FIGURE 4 Interprofessional direction of groups with a low mean versus a high mean interprofessional identity ($n = 102$). [Color figure can be viewed at wileyonlinelibrary.com]

There was more effort shown by high interprofessional identity groups. Group effort was based on quantity of ideas which is central to the hypothesis of Osborn,[51] stating that the generation of more ideas will result in relatively more ideas with a higher quality. This was confirmed by several studies.[39,52,53] However, established groups produce more ideas compared to non-established groups.[52] Our study shows that non-established groups are more productive when its members have a relatively high interprofessional identity. This is in line with results from earlier studies on generation of ideas by groups. Established groups have relatively more time to form a shared identity. Time and frequency of social contact influence degree of identity formation.[15] In turn, a higher shared identity is associated with higher group performance.[26] This explains why an established group is more successful compared to a non-established group. Yet, a group composition based on individuals with already high interprofessional identities is ahead of team development and team identity formation. This emphasises the likely idea that interprofessional identity explains amount of interprofessional collaboration in temporary teams and networks. It is likely interprofessional team development will contribute to interprofessional identity formation because contextual factors are learned by social interaction that also enables commitment to a mixed profession group. Future research should identify factors that determine interprofessional identity formation independent of established team membership.

Findings from this study show that more group members display an increase of effort related to interprofessional collaboration when they have a relatively high interprofessional identity. Such behaviours are congruent to an interprofessional identity. The measurement of interprofessional direction within a mixed profession group was based on video recording of an online group meeting. Online communication is less fluid and expressive compared to in-person communication.[54] It is possible that interprofessional identity will have a stronger association with in-person communication compared to online communication. Combining online and in-person training in clinical practice can be effective.[55] A study on comparison of online versus in-person education settings related to socialisation showed equal effectiveness.[56] So far, there is no available research that compares online versus in-person education settings related to interprofessional socialisation and interprofessional identity formation. Future research should clarify the role of in-person versus online interprofessional socialisation processes and their relationship with interprofessional identity formation.

It is likely interprofessional socialisation during the 2-week IPE-course would also have led to an increase of interprofessional identification. In an earlier experimental study, the exact same course characteristics related to EPIT were applied as an experimental intervention.[5] This earlier study provided evidence that these characteristics can improve hierarchical communication within mixed profession groups as compared to a control condition. Based on the principles of identity-behaviour congruence,[17] it is likely such a behavioural change can be attributed to a change in interprofessional identification.

The group effort was relatively high in both the low and high identity condition. It is likely this is the result of the performance standard of a minimum amount of solutions to be provided by each team. Assessment during this IPE course could have positively influenced the amount of effort of all groups. Therefore, the findings regarding group effort could even be an underestimation. Without a performance standard, it is possible the differences between the low and high identity conditions would have been much larger.

This study reports statistically significant differences of which the educational or clinical significance needs to be discussed. The differences between the mean interprofessional identities of the low versus high identity conditions may be seen as relatively small, though moderate in effect size with satisfactory statistical power. These effects were measurable after facilitating interprofessional socialisation in three group meetings over a period of 2 weeks. It may be noted that the findings depend on the relative small difference in interprofessional identity and that larger effects can reasonably be expected in settings with a larger magnitude range of interprofessional identity.

Participants of our study were dental and dental hygiene students. Some might not consider dental hygiene a profession or might perceive dental hygiene as part of dentistry. In that case the name ‘interprofessional identity’ could be confusing. However, the dental hygienist has different occupational profiles and levels of autonomy depending on the legislation of a country.[57] Dutch dental hygienists have a professional status and also the characteristics of a profession.[58] Apart from their professional status, an official professional status is irrelevant to EPIT as a psychological theory. EPIT applies to any professional group that is perceived as a group. The psychological perception that a group is more than just a collection of individuals is referred to as ‘entitativity’.[59] If one considers a professional group a distinct social entity, an individual can identify with such an entity. According to EPIT, this identification should be complementary to interprofessional identity in order to enable its formation.

The current study was not designed to investigate the interplay between interprofessional identity, competency and environment as joint predictors of interprofessional performance. It does confirm the theorised outcomes based on motivational characteristics like effort and direction towards interprofessional collaboration. It is possible that interprofessional collaboration can be different between groups with the same degree of interprofessional identification because of differences in individual competencies and/or a different set of enablers and barriers in their own learning or work environment.[60] This makes it difficult to determine the relative contribution of interprofessional identity as associated with interprofessional collaboration and as a predictor of interprofessional performance. The relative contribution of interprofessional identity to performance should be clarified by future research.

Interprofessional performance will also depend on professional identity and how this is related to professional competencies. When interprofessional identification is much lower compared to professional identification, it is possible professional identity will dominate social interactions between different professions by mainly focusing on the own professional agenda. It can frustrate interprofessional collaboration when professional beliefs are not pro-interprofessional. According to EPIT, professional identity should be related to

interprofessional identity formation based on its pro-interprofessional beliefs as part of the professional self-concept. When interprofessional identity is relatively high, it will be more likely to be associated with congruent behaviours. So far, little is known about the interplay between professional identity and interprofessional identity.[61]

This study was conducted with students and not practitioners. Since professional identification even starts before becoming a full member of a profession, this is unlikely to pose a problem in generalising our results to practising professionals.[16] Even more so, EPIT is an interprofessional identity theory that builds on existing psychological theories for which relatively much empirical evidence was found.[5,18,23,24,29,32–34,58] The empirical evidence that supports those theories was based on participants of all kind of professional and non-professional backgrounds.

EPIT is not the only theoretical approach to interprofessional identity[62–64] and propositions of any scientific theory should be falsifiable.[65] EPIT only remains a possible representation of reality until proven wrong. The difference between EPIT and other theories on interprofessional identity is that EPIT combines two different but complementary theoretical identity approaches of psychology: identity theory and social identity theory.[18] The professional distinctiveness as represented by a professional identity remains important because professional socialisation is essential to continuing self-improvement on a profession level and commitment to a specific field of expertise. Combining different roles and fields of expertise is inherent to interprofessional collaboration. Thus, both psychological memberships (professional and interprofessional) are different but essential to enable interprofessional collaboration. This implies that an interprofessional identity should have a superordinate relationship with a professional identity of any profession.[5,29,32] This also has specific implications for the measurement of interprofessional identity. Because of this, EPIT does not consider professional identity as a part of the same construct as interprofessional identity (see items and subscales of EPIS). Furthermore, attitudes are also not part of this construct because they only concern an evaluation of an entity (e.g., person, object, process and profession) ranging from extremely positive to extremely negative.[66] However, attitudes are important antecedents of interprofessional identity formation because they can contribute to the formation of an individual self-concept and related emotional attachment when relevant to this identity.[18,30] Finally, the self-concept (or beliefs) of interprofessional identity should be specific enough to enable identity-behaviour congruence.[17] This congruence depends on a goal-directed self-concept related to interprofessional collaboration. Without these specific thoughts, a variety of possible behaviours can be displayed because they will depend on ambiguous interpretations of collaboration and the purpose of the identity group. In short, the most important and essential difference between EPIT and other theories on interprofessional identity is that, according to EPIT, every individual has many memberships and many and potential interacting social identities because of this. Since interprofessional collaboration is a specific collaborative style, identity-related beliefs should be in concordance with this style in order to predict congruent behaviours. The combination of identity theory, social identity theory and the identity-behaviour congruence mechanism has important implications for interprofessional identity formation, the nature of this construct, its measurement and its predictive nature. Gathering evidence to confirm or to reject the propositions of a scientific theory requires a lot of research[65] but EPIT is barely 5 years old.[29] Nevertheless, interprofessional identity is perceived as an important topic by many higher education institutions in different countries and could become a new and additional priority in the future of IPE and collaborative practice.[67]

5 | CONCLUSIONS

Interprofessional identity has a positive effect on interprofessional collaboration after 10 weeks. Higher interprofessional identification leads to more interprofessional effort. It leads to the willingness to co-determine topics, asking each other questions, more mutual engagement and more equal communication in general. Interprofessional identity functions as a source of intrinsic motivation towards interprofessional collaboration related to a wider group membership independent of an established team membership. More IPE research is required to understand interprofessional identity formation and the interplay between interprofessional identity and professional identity, interprofessional and professional competencies, and contextual factors in the learning and work environments.

AUTHOR CONTRIBUTIONS

J.-J. Reinders was responsible for the conceptualisation, data curation, formal analysis, investigation, methodology, project administration, resources, supervision, visualisation and writing the original draft. W. Krijnen was responsible for formal analysis, methodology, validation, visualisation and review and editing.

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CONFLICT OF INTEREST STATEMENT

The authors declare no conflict of interest.

ETHICS STATEMENT

Students could give their consent to participate in this study by completing an informed consent as part of an online questionnaire. Beforehand, students could read about the purpose of the study and the guarantee of voluntary participation. In addition, students were also informed about the study during a lecture and were enabled to ask questions about this study during or after the lecture. The Institutional Review Board of the University Medical Center Groningen reviewed the protocol and approved the study (METc 2022/064 and METc 2022/297).

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