

## Reducing public communication apprehension by boosting self confidence on communication competence

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### Abstrak

**Latar belakang:** Dokter harus kompeten dalam berkomunikasi dengan sesama dokter atau dengan profesi lain. Pada Fakultas Kedokteran Universitas Mulawarman, beberapa mahasiswa cenderung diam pada saat pelatihan komunikasi public, yang tampaknya disebabkan oleh kecemasan saat berkomunikasi. Penelitian ini bertujuan untuk menganalisa kemungkinan 'kepercayaan diri terhadap kemampuan komunikasi' dan 'ketrampilan berkomunikasi' sebagai factor resiko terjadinya 'kecemasan dalam komunikasi publik'

**Metode:** Penelitian ini dilakukan pada 55 mahasiswa Fakultas Kedokteran Universitas Mulawarman. Kecemasan dalam komunikasi public diukur dengan Personal report of communication apprehension (PRCA-24), kepercayaan diri terhadap kemampuan komunikasi dengan Self perceived communication competence scale (SPCC), ketrampilan berkomunikasi didasarkan pada penilaian instruktur saat program pelatihan komunikasi, Data dianalisa dengan regresi linear untuk mengidentifikasi factor yang dominan, menggunakan STATA 9.0

**Hasil:** Hasil penelitian menunjukkan hubungan negative antara kecemasan dalam public komunikasi dengan kepercayaan diri terhadap kemampuan komunikasi (koefisien regresi (KR) =-0.13; p=0.000; 95% derajat kepercayaan (DK) =-0.20; -0.52). Tetapi, terbukti tidak berhubungan dengan ketrampilan komunikasi (p=0.936). Diantara 12 trait kepercayaan diri terhadap kemampuan komunikasi, mahasiswa yang percaya diri saat berkomunikasi dengan sekelompok orang yang masih asing mempunyai tingkat kecemasan paling rendah (KR suaian=-0.13; DK=-0.21; 0.05; p=0.002).

**Kesimpulan:** Semakin tinggi kepercayaan diri mahasiswa terhadap kemampuan komunikasinya akan semakin rendah tingkat keemasannya. Untuk itu, fakulta kedokteran perlu memberikan kesempatan bagi mahasiswa mempraktekkan komunikasi public, terutama dengan berbicara kepada sekelompok orang asing. (*Health Science Indones 2010; 1: 37 - 42*)

**Kata kunci:** berbicara, kelompok, kemampuan komunikasi

### ABSTRACT

**Background:** A medical doctor should be competent in communicating with others. Some students at the medical faculty Universitas Mulawarman tend to be silent at public communication training, and this is thought to be influenced by communication anxiety. This study aimed to analyze the possibility of self-confidence on communication competence and communication skills are risk factors of communication apprehension.

**Methods:** This study was conducted on 55 students at the medical faculty Universitas Mulawarman. Public communication apprehension was measured using the Personal Report of Communication Apprehension (PRCA-24). Confidence in communication competence was determined by the Self Perceived Communication Competence scale (SPCC). Communication skills were based on the instructor's score during the communication training program. Data were analyzed by linear regression to identify dominant factors using STATA 9.0.

**Results:** The study showed a negative association between public communication apprehension and students' self confidence in communication competence [coefficient regression (CR) =-0.13; p=0.000; 95% confidence interval (CI)=-0.20; -0.52]. However, it was not related to communication skills (p=0.936). Among twelve traits of self confidence on communication competence, students who had confidence to talk to a group of strangers had lower public communication apprehension (adjusted CR=-0.13; CI=-0.21; 0.05; p=0.002).

**Conclusions:** Increased confidence in their communication competence will reduce the degree of public communication apprehension by students. Therefore, the faculty should provide more opportunities for students to practice public communication, in particular, talking to a group of strangers more frequently. (*Health Science Indones 2010; 1: 37 - 42*)

**Key words:** talk, group, communication apprehension, communication skills

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Effective communication with other people is an important life skill. People who communicate effectively know how to interact with others flexibly, skillfully, and responsibly, but without sacrificing their own needs and integrity. One communication context is public communication skills which are needed to reach some understanding, influence, build trust, and change perception to others.

The ability to communicate, in general, is influenced by communication competence, cognitive competence, willingness to communicate, and communication apprehension.<sup>1-3</sup> These factors do not solely affect communication but also affect each other.

Communication apprehension is defined as a fear or anxiety about actual or anticipated communication with other individuals and is a behavioral trait related to the psychological constructs of shyness and reticence.<sup>4</sup> Communication apprehensive individuals usually adopt avoidance and withdrawal behavior and are, therefore, less likely to engage in oral communication.<sup>5</sup> Investigation about communication apprehension attributes with United States students showed nine reasons for public communication anxiety: humiliation, lack of preparation, physical appearance, rigid rules, personality traits, audience interest, unfamiliar role, mistakes, and negative results.<sup>6</sup> Most of it originated from insecure feelings or lack of self confidence.

As future physicians, medical students must be competent in communication to effectively practice medicine.<sup>7</sup> In practice, a medical doctor should be able to communicate with others in a public context, such as health extension, counseling, and education. Therefore, during their educational process, students should be given a broad opportunity to practice and develop their communication skills. Some learning activities are expected to be used by students, including small group discussions and class discussions, both plenary and in communication skills training. Previous studies indicate that there are some students who participate less actively in each of these learning activities due to anxiety in communicating.<sup>8</sup> Therefore, it is important to

investigate the correlation between communication apprehension with self confidence on communication competence (SCCC) and communication skills (CS) as the possible risk factors.

## METHODS

A cross sectional study was carried out among third and fourth year students at the Faculty of Medicine, Universitas Mulawarman - Indonesia, who were willing to join this research voluntarily. Data was collected after the plenary discussions on 30 October 2010. Completion of questionnaires was guided by the researchers, ready to clarify each item of the questionnaire. The results of this study ends with a recommendation for a better approach to improving student competence on public communication.

Public communication apprehension (PCA) was measured by the Personal Report of Communication Apprehension-24 (PRCA-24), an instrument which focuses on anxiety about oral communication, using the Likert scale.<sup>9</sup> This study only measured the public context of communication apprehension, excluding speaking context in large meetings, small groups, and dyads, therefore only analyzing 6 out of 24 questions of the PRCA. Internal (alpha) reliability estimates have ranged from 0.91 – 0.96.<sup>10</sup>

Self-perceived communication competence was measured by the Self-Perceived Communication Competence Scale (SPCC) which consists of 12 questions.<sup>11</sup> The questions asked students to estimate their communication self-confidence on a range from 0 to 100%. In earlier studies, internal (alpha) reliability estimates of 0.92 have been observed.<sup>11</sup>

The measurement of communication skills (CS) was based on a numeric score given during one session of communication training. The score was the sum of a global rating of cognitive, psychomotor, and attitude observed by the instructor.

The results of the research were analyzed using STATA 9.0 software. Analysis was done by linear regression to determine confounding factors and risk factors of communication

apprehension based on the consideration that the data was on a ratio scale. The consent of all participants involved in this study was obtained after informed consent was given

## RESULTS

Of 107 third and fourth year students, 55 students participated in the study. Since the study measured anxiety and confidence, it preferred student volunteers who felt comfortable with the purposes of the study. The samples consisted of 65% women and 67% students. As to academic achievement, 16% of the students were very satisfied with their cumulative GPA which was more than 3.5 and

only 5% had a borderline cumulative GPA (2.00–2.49).

Most students (73%) had a public communication anxiety level above average. Respondents who had self confidence on communication competence (SCCC) and communication skills better than average were 43.6% and 45.5%, respectively.

This study indicated a negative correlation between PCA, SCCC, and CS. This study showed no relationship between CS, represented by the score given during communication skill training, and PCA (Table 1).

Table 1 Interplay between self-confidence on communication competence and communication skill with public communication apprehension

	Regression coefficient (Rc)	95 % Confidence Interval (CI)	P
Self confidence on communication competence	-0.14	-0.22 ; -0.07	0,001
Communication skill	0.01	-0.16 ; 0.17	0,936
Constant	26.	13.04 ; 40.65	0.000

Table 2 revealed one dominant trait of SCCC which reduced PCA, and that was the confidence to talk in a small group of strangers. Two other traits, confidence to talk with a stranger and present a talk to a group of friends, had the tendency of minimizing PCA.

Further analysis of the between dominant and tendentious traits with PCA, established higher self confidence to talk in a small group of strangers as a dominant factor to reduce the PCA (Table 3).

Table 3 Final model of the relationship between dominant traits of self-confidence on communicative competence and public communication apprehension

	Adjusted Regression coefficient	95 % Confidence interval	P
Talk in a small group of strangers.	-0.13	-0.21; 0.05	0.002
Talk with a stranger.	-0.09	-0.04; 0.22	0.177
Present a talk to a group of friends.	-0.09	-0.21; 0.03	0.152
Constant	18.31	15.35; 21.27	0.00

Table 2 Interplay between traits of self-confidence on communication competence with public communication apprehension

	Regression coefficient	95% Confidence Interval (CI)	P
Present a talk to a group of strangers	-0.00	-0.10; 0.09	0.970
Talk with an acquaintance	0.07	-0.07; 0.20	0.339
Talk in a large meeting of friends.	0.05	-0.06; 0.16	0.382
Talk in a small group of strangers.	-0.11	-0.21; 0.00	0.051
Talk with a friend.	-0.07	-0.26; 0.12	0.467
Talk in a large meeting of acquaintances.	-0.01	-0.09; 0.12	0.803
Talk with a stranger.	0.09	-0.04; 0.22	0.177
Present a talk to a group of friends.	-0.09	-0.21; 0.03	0.152
Talk in a small group of acquaintances.	0.00	-0.20; 0.19	0.963
Talk in a large meeting of strangers.	-0.02	-0.09; 0.06	0.697
Talk in a small group of friends.	0.05	-0.08; 0.18	0.469
Present a talk to a group of acquaintances	-0.01	-0.10; 0.07	0.774
Constant	20.40	9.21; 31.59	0.001

## DISCUSSION

This research was conducted with the involvement of third and fourth -year medical students who were considered to have enough experience doing a variety of communication contexts during their study at the Medical Faculty of Universitas Mulawarman. The students were accompanied by the researcher during the completion of the questionnaire, so that any uncertainty on any item of the questionnaire could immediately be clarified. The questionnaire used was a standardized questionnaire (PRCA-24, SPCC) which has proven its validity and reliability, and the communication skills scores were a global rating based on the instructor's judgment. A limitation that should be considered in interpreting the results of this study is the

limited sample size, because the recruitment was based on the willingness of students to participate. This was intended to reduce anxiety and get more honest answers. Some students (48, 5%) were not willing to participate because the study asks students' identities, different from previous studies that allowed anonymity. This approach was needed because the data obtained must be paired with communication skill scores.

Communication apprehension, a communication aspect much studied since the 1970s, is allegedly associated with trait, type of audience, context, and situation. Based on the context, communication apprehension can be categorized into public, meetings, small group, and dyad with each having its own characteristics as the trigger of anxiety.

Research on the student medical faculty of Mulawarman University showed the highest means of communication apprehension occurred in the context of public communication.<sup>8</sup> MacIntyre and Gardner reported communication apprehension may exist both outside and inside the classroom where there are worries about being evaluated and worries of looking foolish in front of peers (social anxiety).<sup>12</sup>

This study more specifically analyzed confidence in communication competence and communication skills for both concepts are regarded as the main factors of public communication. The results show that low SCCC will increase PCA, regardless of whether or not the students have good communication skills. In general, the relationship between self-esteem and communication apprehension is in accordance with the conjecture from McCroskey's previous study.<sup>13</sup> Since students with high communication apprehension prefer to avoid or withdraw from communication, it would seem reasonable to assume that they will be less likely to engage in communication behaviors of all types, including public. If we take into account that high apprehension results in negative self-esteem, the explanation appears even more tenable. If a person has a negative evaluation of the self, it would seem reasonable for the person to prevent others from knowing their weaknesses to prevent others from having similar negative perceptions.

A similar result was produced by the Carrell and Willmington's study, which reported that no association was found between self-reports of communication competence and ratings of communication competence, and between self-reports of communication apprehension and observer ratings of communication competence.<sup>14,15</sup> However, different results were reported by two other studies, which indicated communication apprehension has a negative correlation with the level of communication and cognitive skills.<sup>16,17</sup> Despite the similarity and differences, the other studies emphasized global communication apprehension which was obtained from four communication context

summaries, therefore, not really similar with this study.

Even though the analysis showed that SCCC had a stronger association with PCA compared to CS, it does not mean that real communication skills have no role in the emergence of communication apprehension. Real skills and confidence are believed to have an effect on reciprocity, so that the effect of each on communication apprehension can occur indirectly or directly.

There were twelve traits of SCCC, generally categorized into communication with strangers, acquaintances, and friends, as well as in the public, meetings, small groups, and dyad contexts.<sup>1</sup> Among those traits that can reduce the PCA are increasing student exercises of talking to small groups of strangers. Other traits that tend to give the same effect are increasing the chances to talk with a stranger or presenting a speech to a group of friends, although the effect is not expected to be as much as the exercise of talking to a small group of strangers. Any approach based on these results should be designed carefully, because Del Villar's research showed that training and exposure will induce more anxiety on high communication apprehension students.<sup>18</sup>

Although communication apprehension does not receive special attention in developing the quality of student communications, in the presence of communication apprehension the quality of student engagement and participation in public communication is affected.

In conclusion, high SCCC will reduce communication apprehension. In addition, increasing student exercises of talking to a small group of strangers can be a useful strategy to boost students' self confidence, which in turn will reduce communication apprehension.

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