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**Impacts of the interpersonal relationship on interactive patient
citizenship and dysfunctional behaviors:
An empirical analysis in the nursing context**

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- 1 Introduction**
- 2 Forms of interactive patient citizenship and dysfunctional behavior:
Literature review and exploratory analysis**
- 3 Effects of the perceived interpersonal relationship on interactive patient
citizenship and dysfunctional behavior: Conceptual framework and
hypotheses development**
- 4 Quantitative empirical study: Methodology and findings**
- 5 Conclusion and implications**

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Patients are widely acknowledged as **indispensible co-creators of value** in the health care context

- ▶ Studies focus on **mandatory inpatient participation behavior towards physicians** in the health care service encounter

As research concerning different types of value co-creation behavior in other specific health care contexts has shown, **patients do not only show mandatory**, but also different kinds of **voluntary behavior**

- ▶ **Inpatients** may also perform different kinds of such **extra-role, citizenship behavior** benefiting the service provider in some way

On the contrary, research in professional service contexts demonstrates that co-creation behavior of customers **may not always be effective**

- ▶ Therefore, **dysfunctional patient behavior**, defined as any patient behavior that obstructs the service provider from co-creating value, **may also be an issue in the clinic context**, where patients are in an anxiety-producing situation in which they are confronted with uncertainty and risk

- ▶ In the clinic context, inpatients may show citizenship and dysfunctional behavior **especially during service interactions with nurses due to the nature, duration and intensity of the interpersonal relationship between patients and nurses**
- ▶ **The role of the nurse** as health care provider differs from the role of physicians: **Nurses see fewer patients and spend more time with each patient**
- ▶ Thus, they seem to be able **to develop closer interpersonal relationships based on communication and observable actions**, which may have an impact on patient citizenship as well as dysfunctional behavior

Patient citizenship and dysfunctional behavior may emerge in different forms and can also occur simultaneously.

- ▶ Considering current research in health care services, there is a **lack concerning inpatient citizenship and dysfunctional behavior towards the nurse during service interactions in the service encounter.**
- ▶ Moreover, it is necessary to investigate the **different forms** of citizenship and dysfunctional behavior in detail as well as to identify **opportunities for nurses to influence these different forms** of patient behavior during service interactions.

RESEARCH GAP

Our study addresses this research gap by developing and empirically testing a research model to explain the influence of the perceived nurse-patient-relationship on the different forms of patient citizenship and dysfunctional behavior.

The objectives of the study are to...

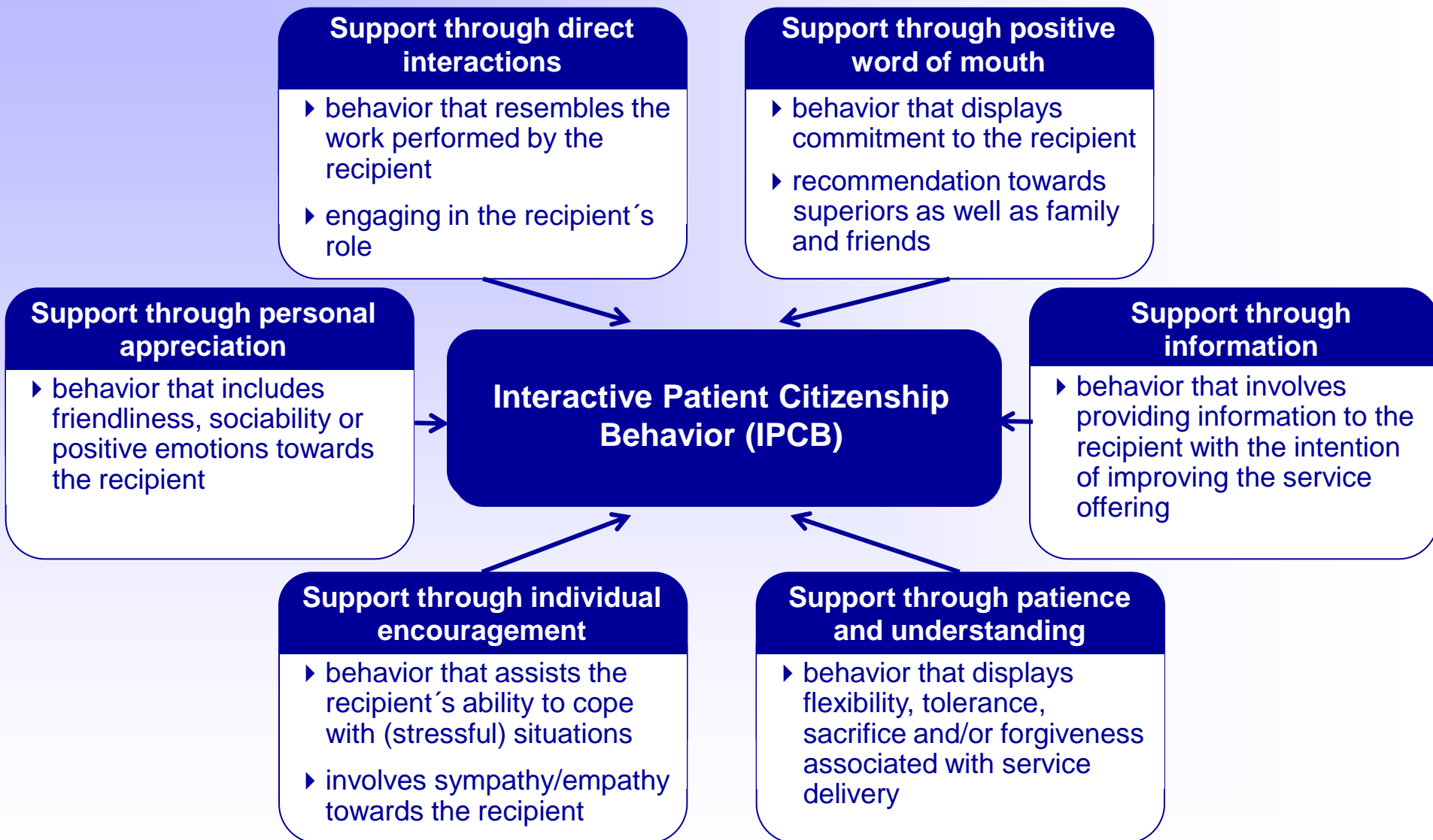
...identify **different forms of patient citizenship and dysfunctional behavior** during service interactions with nurses

...demonstrate **direct as well as indirect effects** - emerging through positive and negative patient emotions - **of the perceived interpersonal relationship** on different forms of interactive patient citizenship and dysfunctional behavior

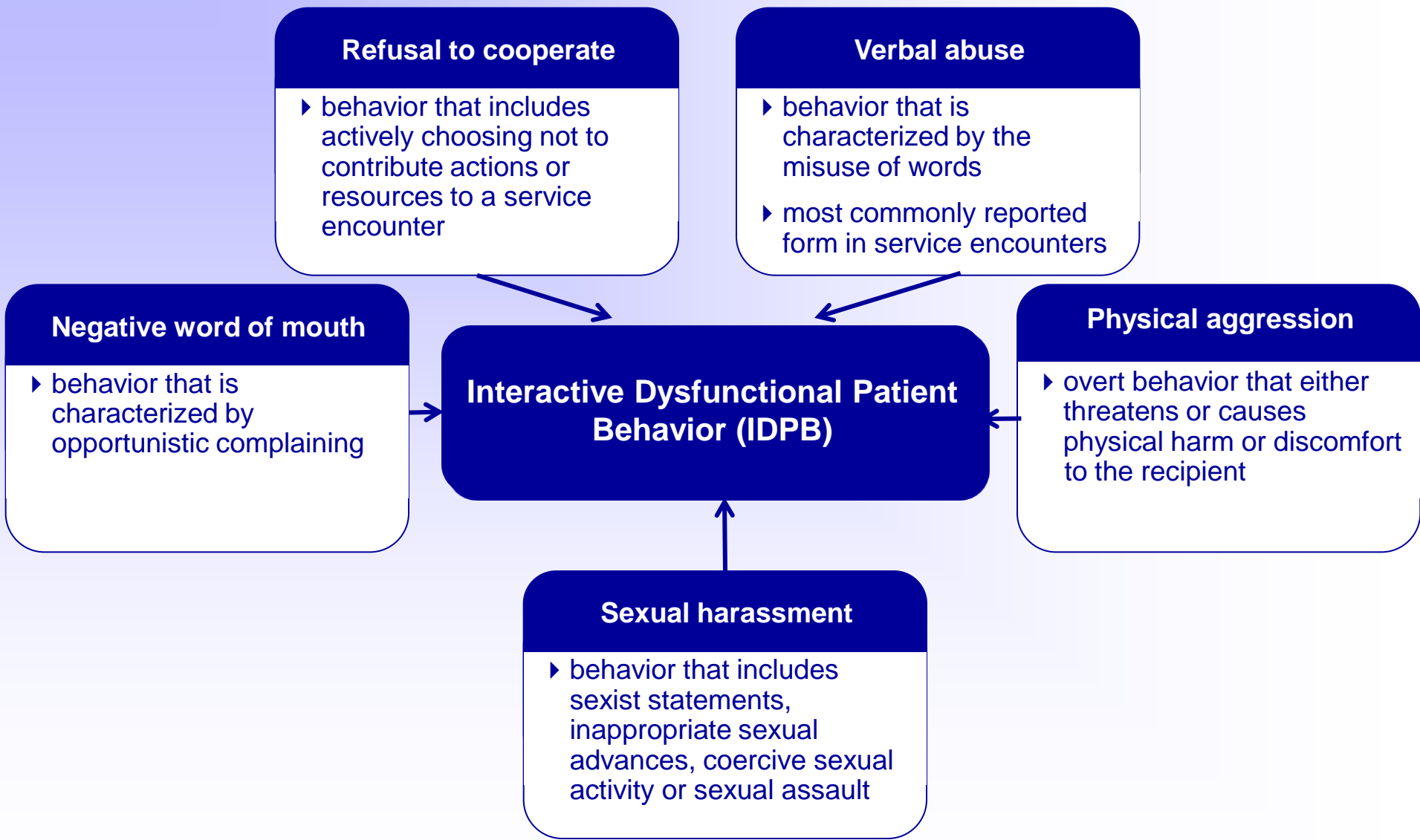
...show how different forms of interactive patient citizenship and dysfunctional behavior **influence perceived service quality**

...provide empirical evidence that **patients' perceptions of the communication and interactive citizenship behavior of nurses** affect the interpersonal relationship

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(based on Garma/Bove 2011)



(based on Greer 2015)

Literature review

Data collection

- ▶ In-depth, face-to-face, semi-structured interviews with 17 inpatients and 26 nurses in four hospitals

Data analysis

- ▶ All interviews were recorded and transcribed
- ▶ The analysis followed a combination of conventional and directed content analysis using the qualitative data analysis software MAXQDA 11
- ▶ The researchers deductively developed and inductively refined a coding scheme
- ▶ The test of inter coder reliability resulted in a value of 0.71, which is above the recommended threshold of 0.70

Form of IPCB	Quotes Inpatients		Quotes Nurses	
	Absolute frequency	Relative frequency	Absolute frequency	Relative frequency
Support through direct interactions	51	39,84 %	67	34,01 %
Support through positive word of mouth	10	7,81 %	26	13,2 %
Support through information	9	7,03 %	27	13,71 %
Support through patience and understanding	35	27,34 %	36	18,27 %
Support through individual encouragement	15	11,72 %	25	12,69 %
Support through personal appreciation	8	6,25 %	16	8,12 %
Total	128	100 %	197	100 %

“Ich rufe nicht jedes Mal eine Krankenschwester, um mein Bett hochzuziehen, das versuche ich schon irgendwie selber hinzubekommen.”

(weibliche Patientin)

	Quotes Nurses			
	frequency	Relative frequency	Absolute frequency	Relative frequency
Support through direct interactions	51	39,84 %	67	34,01 %
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Support through... “	15	11,72 %	25	12,69 %
			16	8,12 %
Total	126	100 %	197	100 %

“Man vergisst es einfach, wem habe ich jetzt noch eine Infusion angehängt (...) das ist dann halt schon mal ganz gut, wenn die Patienten sich melden oder einen daran erinnern...” (weibliche Pflegekraft)

“Oder eben, der Patient erkennt das, oh, Sie haben ja keine Zeit, Schwester, ich will Sie nicht aufhalten. Sowas kommt da.”

(weibliche Pflegekraft)

Form of IDPB	Quotes Inpatients		Quotes Nurses	
	Absolute frequency	Relative frequency	Absolute frequency	Relative frequency
Refusal to cooperate	20	74,07 %	72	54,14 %
Verbal abuse	4	14,81 %	23	17,29 %
Physical aggression	0	0 %	11	8,27 %
Negative word of mouth	3	11,11 %	20	15,04 %
Sexual harrassment	0	0 %	7	5,26 %
Total	27	100 %	133	100 %

“Es gibt schon auch Patienten, die das verweigern. Ja, gibt es. Die sagen, ich wasche mich nicht. Wenn Sie das nicht machen, wasche ich mich halt nicht.”
(weibliche Expertin)

„Ja, die werden auch ausfällig (...) bei Kollegen höre ich das auch ganz häufig (...) Die werden dann wirklich angeraunzt und ange-... ja, beschimpft. Auch teilweise beleidigt.“
(männliche Pflegekraft)

	Absolute frequency	Relative frequency		
Refusal to cooperate		74,07 %	72	54,14 %
Verbal abuse	4	14,81 %		
Physical aggression	0	0 %		
Negative word of mouth	3	11,11 %	1	0,75 %
Sexual harassment	0	0 %		
Total	27	100 %	133	100 %

“Ja, gab´s dann auch schon mal, dass es dann einen Knuff gab oder irgendwie einen Schlag, oder so. Oder man wurde weggeschubst. Gab´s alles. Ja, ja.”
(männliche Pflegekraft)

“Bei jüngeren Schwestern, die auch vielleicht ein bisschen attraktiver sind (...) dann kommt das vor. Wenn (...) es ist jetzt einmal, wo ich da war, vorgekommen, dass eine Schülerin (...) hat einen Tapschen auf den Popo gekriegt von einem Patienten. Das geht gar nicht!”(weibliche Pflegekraft)

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Hypotheses development

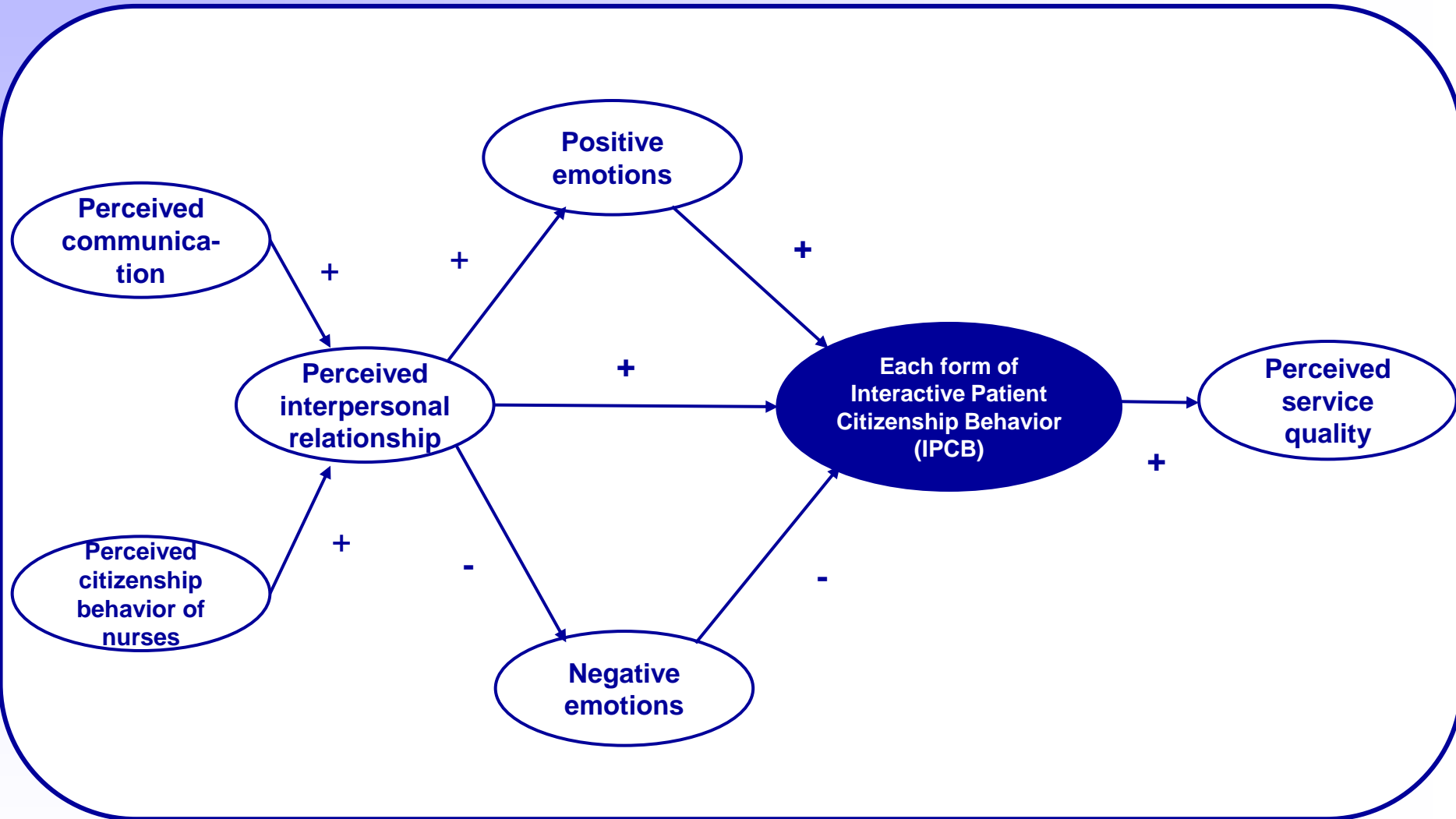
based on findings from

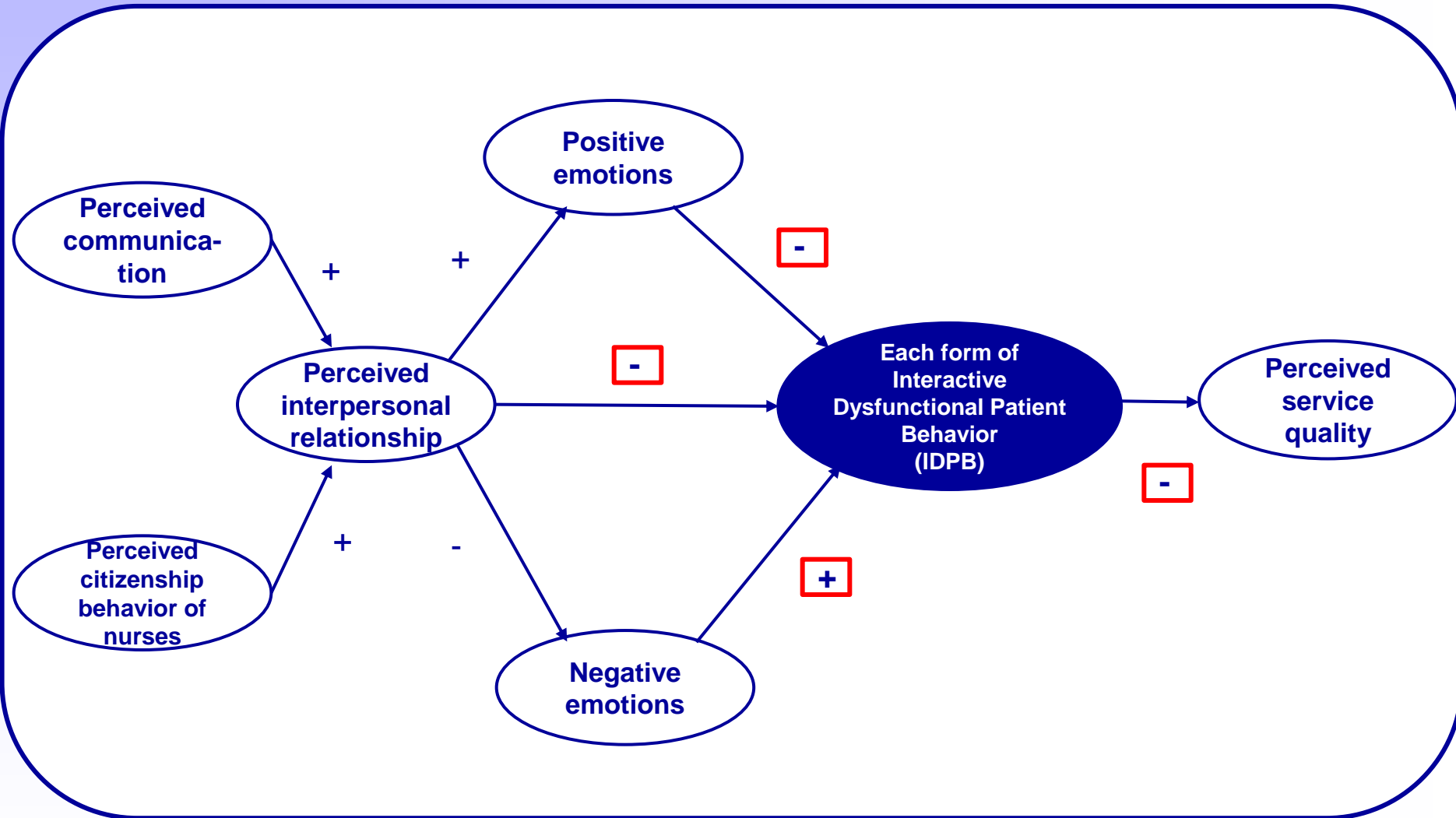
Literature review

- ▶ Customer Citizenship Behavior ✓
- ▶ Dysfunctional Customer Behavior ✓
- ▶ Relationship Marketing ✓
- ▶ Nursing/Health Care Services ✓

Theoretical foundation

- ▶ Social exchange theory
(especially the expectation of reciprocity)
- ▶ Affect theory of social exchange





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Development and pre-test of the questionnaire

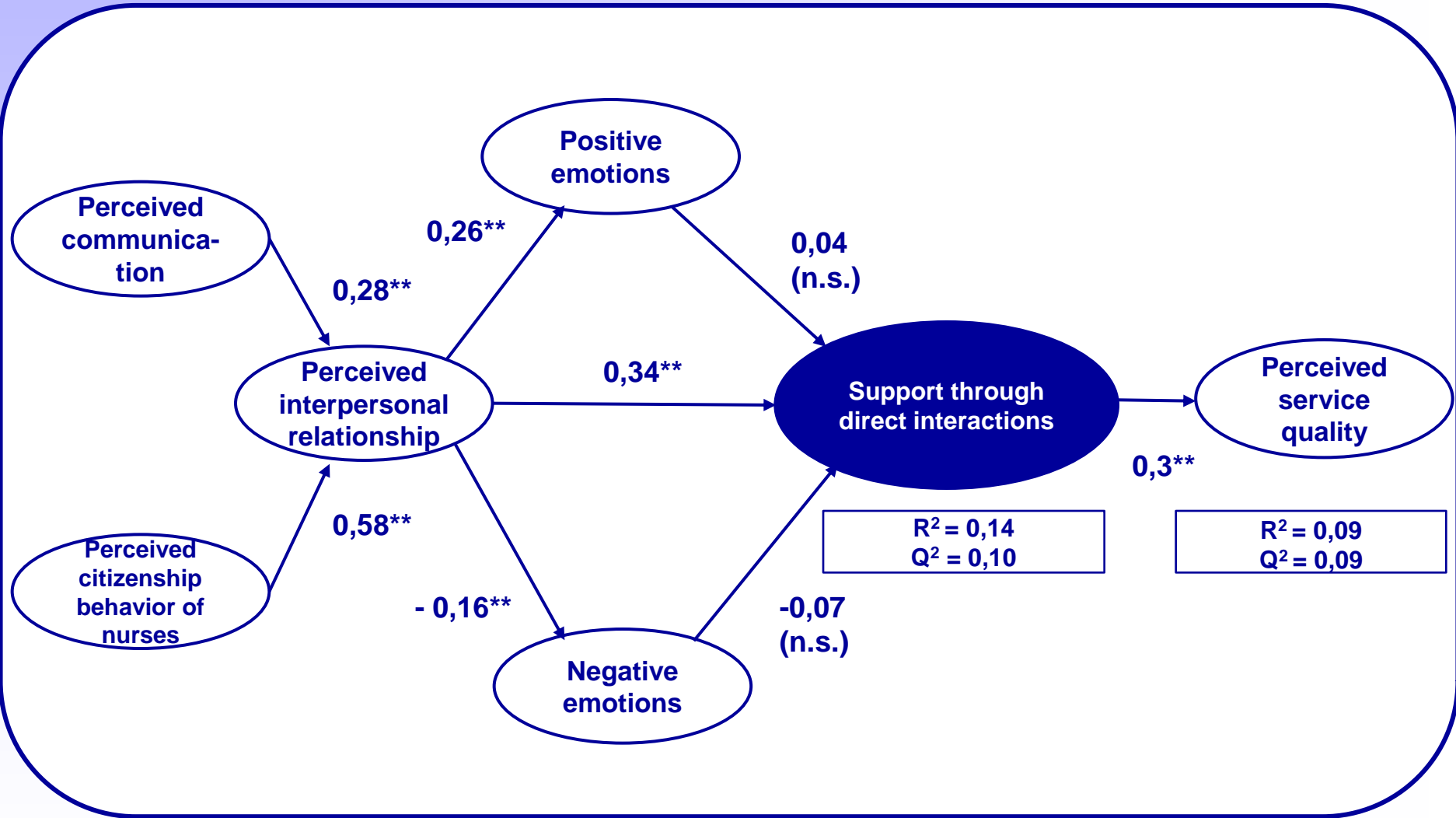
- ▶ Use of existing scales when available (e.g. PANAS scale)
- ▶ Further development of specific scales for the purpose of this study

Data collection

- ▶ 929 patients were asked to participate in the study during their stay in hospital
- ▶ Consideration of a code of ethics
- ▶ In total, 456 patients participated (response rate of 49 %)
- ▶ Structured questionnaires were self-completed by the patients during their stay in hospital
- ▶ 404 questionnaires were usable for the analysis

Data analysis

- ▶ Two-stage modeling approach (Anderson & Gerbing)
- ▶ Measurement model estimation (SmartPLS 2.0)
- ▶ Analysis of content validity, indicator and construct reliability, as well as discriminant and convergent validity
- ▶ Harman's single factor test
- ▶ Structural equation modeling analysis for each form of patient citizenship and dysfunctional behavior



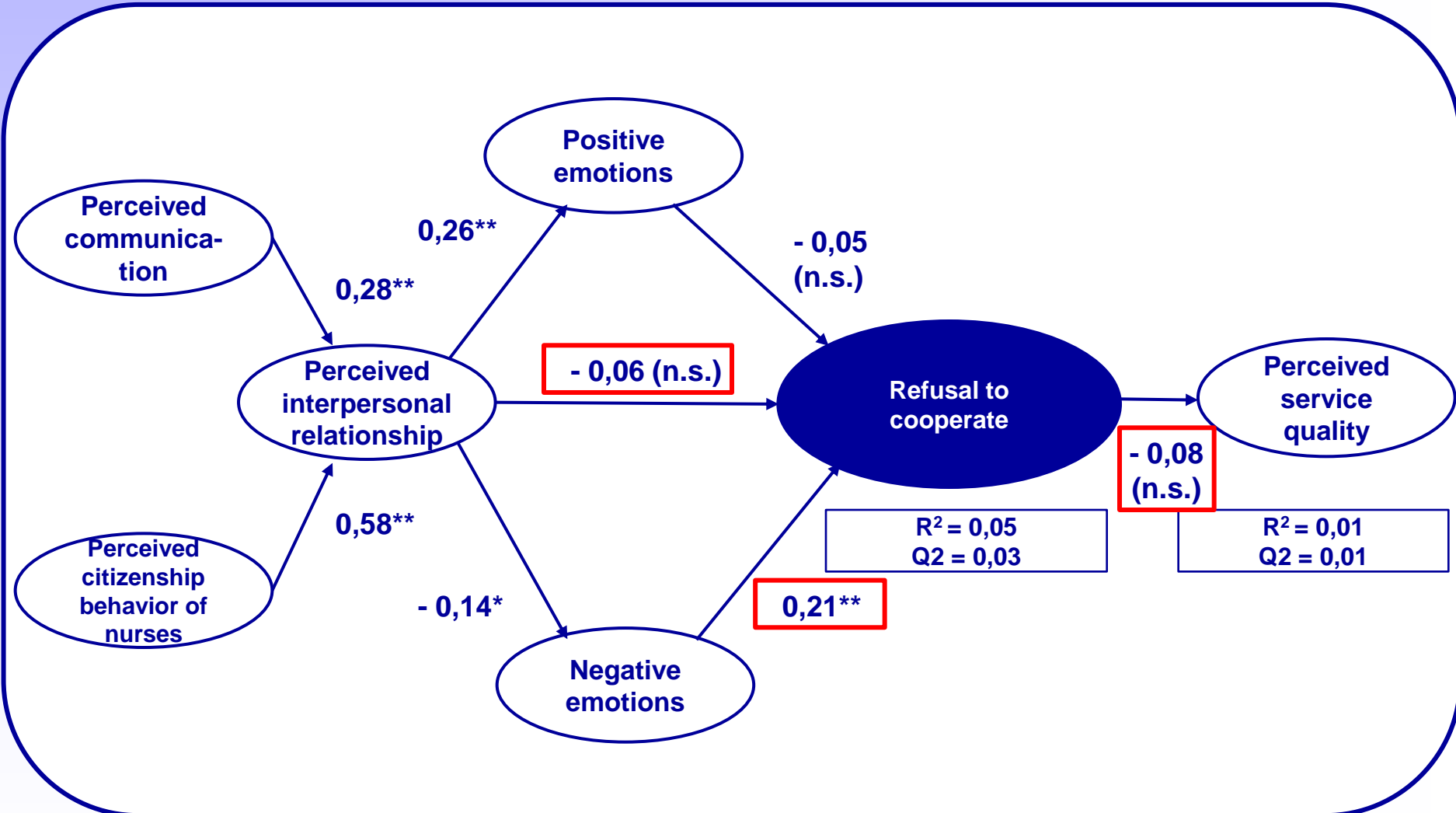
*p < 0,05; **p < 0,01

Results of the PLS estimates: Forms of Interactive Patient Citizenship Behavior

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Structural Paths	Support through direct interactions	Support through information	Support through patience and understanding	Support through positive word of mouth	Support through individual encouragement	Support through personal appreciation
Communication -> Relationship	0,28**	0,27**	0,28**	0,27**	0,27**	0,27**
Citizenship Nurse -> Relationship	0,58**	0,58**	0,58**	0,58**	0,58**	0,58**
Relationship -> Positive emotions	0,26**	0,26**	0,27**	0,26**	0,26**	0,26**
Relationship -> Negative emotions	-0,16**	-0,17**	-0,18**	-0,19**	-0,19**	-0,18**
Relationship -> IPCB	0,34**	0,34**	0,44**	0,5**	0,54**	0,38**
Positive emotions -> IPCB	0,04	0,17**	-0,02	0,09	0,09*	0,13**
Negative emotions -> IPCB	-0,07	-0,03	-0,03	-0,02	-0,02	-0,01
IPCB -> Service quality	0,3**	0,28**	0,32**	0,49**	0,49**	0,37**

*p < 0,05; **p < 0,01



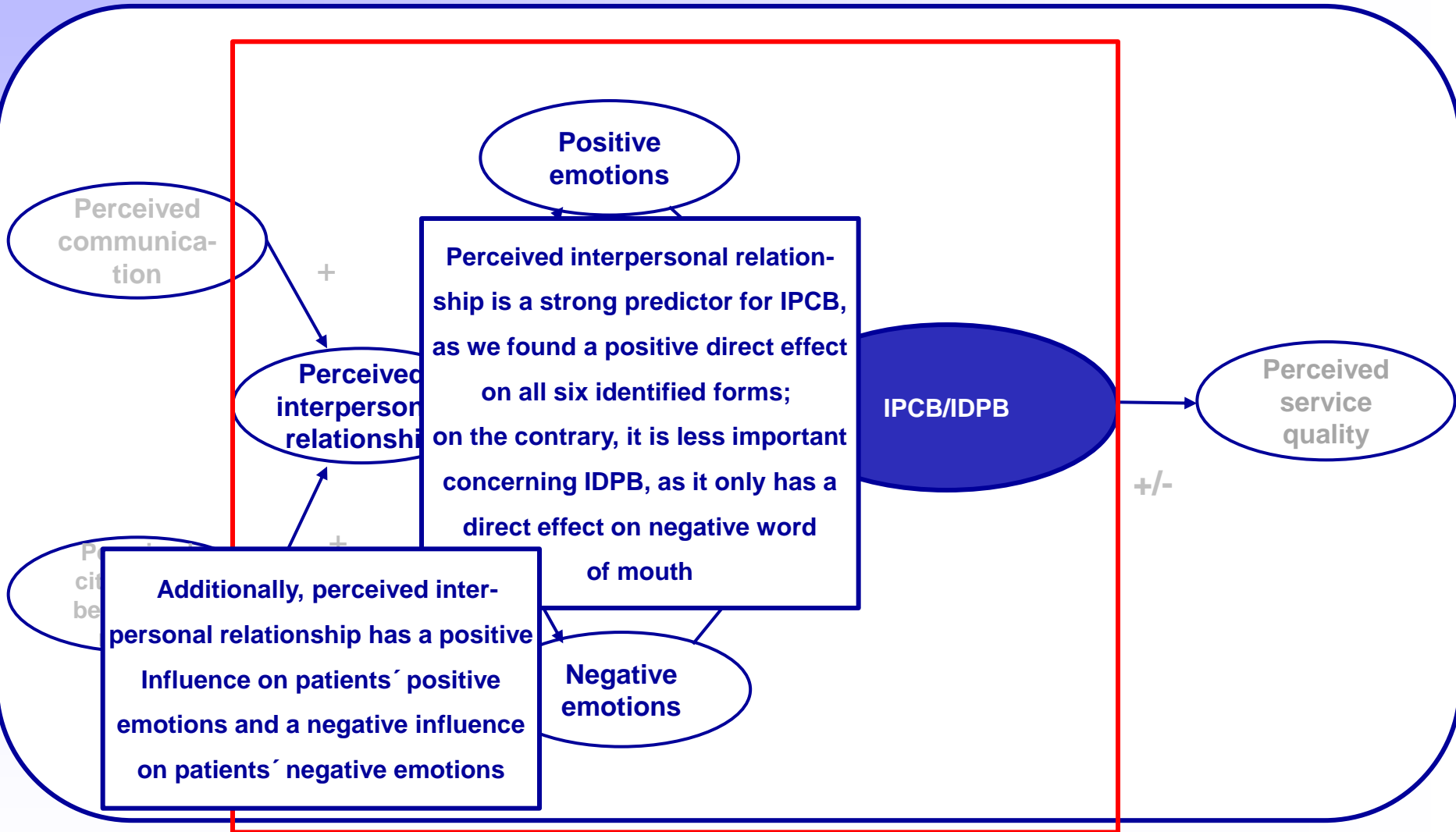
*p < 0,05; **p < 0,01

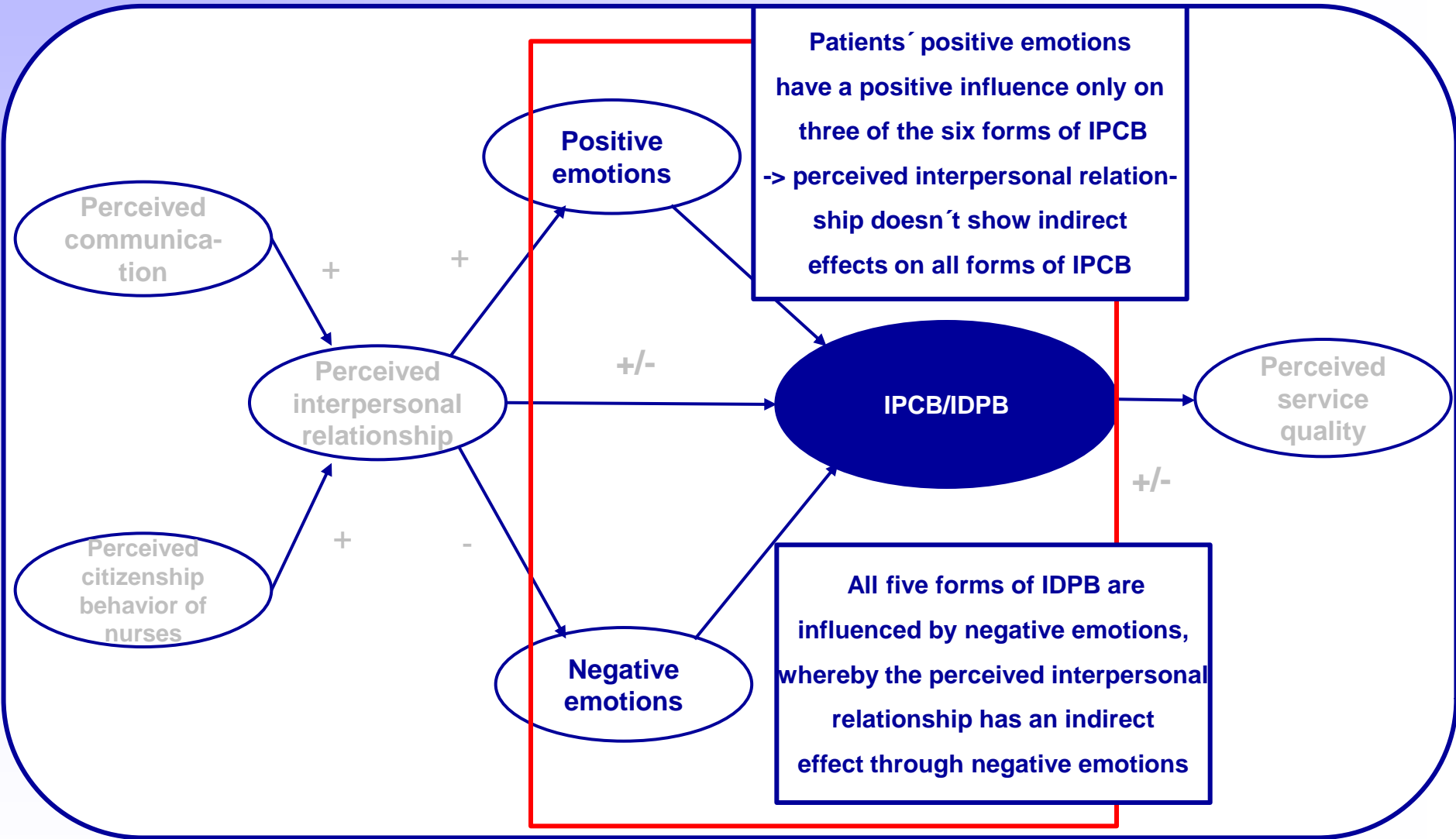
Results of the PLS estimates: Forms of Interactive Dysfunctional Patient Behavior

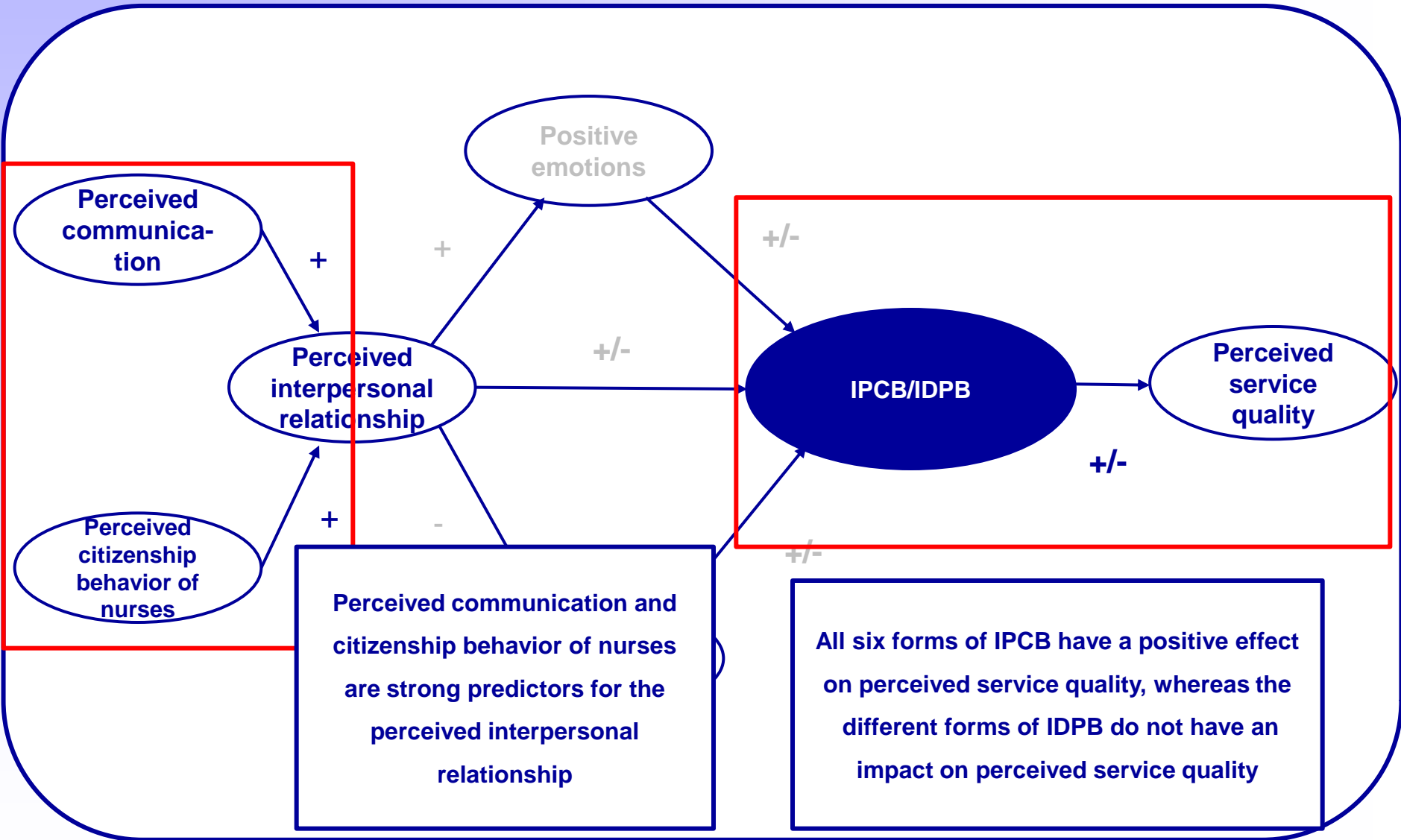
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Structural Paths	Refusal to cooperate	Verbal abuse	Negative word of mouth	Physical aggression	Sexual harrassment
Communication -> Relationship	0,28**	0,28**	0,28**	0,28**	0,28**
Citizenship Nurse -> Relationship	0,58**	0,58**	0,58**	0,58**	0,58**
Relationship -> Positive emotions	0,26**	0,26**	0,26**	0,26**	0,26**
Relationship -> Negative emotions	-0,14*	-0,16**	-0,16**	-0,15**	-0,15**
Relationship -> IDPB	-0,06	-0,03	-0,11*	-0,01	-0,00
Positive emotions -> IDPB	-0,05	-0,11	-0,01	-0,03	-0,00
Negative emotions -> IDPB	0,21**	0,22**	0,23**	0,18*	0,2**
IDPB -> Service quality	-0,08	-0,07	-0,09	-0,03	-0,01

*p < 0,05; **p < 0,01



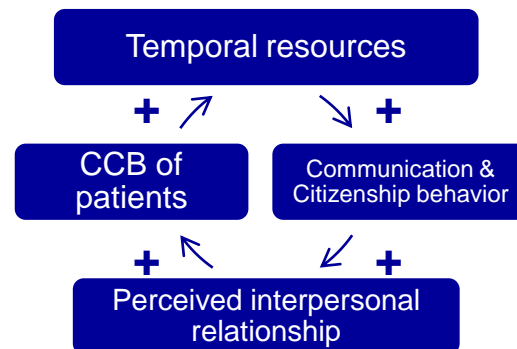




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Our results strengthen the high relevance of positive interpersonal relationships for the different forms of interactive citizenship behavior of inpatients:

- ▶ Nurses are able to stimulate patient citizenship behavior directly, which in turn has an impact on perceived service quality
- ▶ Perceived communication and citizenship behavior of nurses are crucial to establish strong interpersonal relationships
- ▶ Thus, it is necessary that the hospital management understands that nurses need to have special communication skills as well as **temporal resources which contribute to efficient nursing processes** :



- ▶ Moreover, nurses need to understand the importance of the norm of reciprocity in order to be motivated to show interactive citizenship behavior

On the contrary, the interpersonal relationship provides lesser chances to influence the different forms of interactive dysfunctional behavior of patients

- ▶ The direct effect of the interpersonal relationship on interactive dysfunctional patient behavior is rather low, as the results show only significant correlations concerning one form of IDPB
- ▶ However, nurses have the chance to influence interactive dysfunctional patient behavior indirectly by reducing the patients' negative emotions
- ▶ This basically brings along the same implications concerning interactive patient citizenship behavior
- ▶ Moreover, it is crucial that nurses are trained with special tactics in order to cope with dysfunctional patient behavior
- ▶ Finally, dysfunctional behavior in the form of lacking participation may be caused by unclear role requirements; therefore, patient education may enhance the understanding of their role in the service delivery

Thank you very much for your
interest and your attention!

We are looking forward to your
questions and comments.

Contact

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