

Marilda E. Novaes Lipp<sup>1</sup>

## *Stress and Quality of Life of Senior Brazilian Police Officers*

### *Stress e Qualidade de Vida em Policiais Civis Brasileiros*

#### RESUMO

Esse estudo investigou níveis de stress ocupacional e qualidade de vida na Polícia Civil em quatro Estados brasileiros usando como comparação os dados já publicados sobre stress em policiais civis de São Paulo. Foram entrevistados 1.117 policiais civis, a maioria (61%) do sexo masculino. A idade média foi 40 anos com desvio padrão de 9 anos. Verificou-se que os oficiais da polícia civil consideravam seu trabalho como muito estressante e entre 43% e 57% deles tinham sintomas de stress. Os sintomas mais comuns foram a irritabilidade e sensação de cansaço constante. O padrão de qualidade de vida encontrado era deficitário, principalmente no que diz respeito à saúde. O estudo mostrou que há necessidade de ações que objetivem mudanças organizacionais dentro da própria instituição da Polícia Civil. Essas medidas devem estimular mudanças saudáveis nos hábitos de vida e a aquisição de estratégias de enfrentamento que possam promover uma melhor qualidade de vida do pessoal da segurança pública no país.

**Palavras-chave:** Stress; Trabalho; Policiais

#### ABSTRACT

This study investigated the levels of occupational stress and quality of life in the police force in four Brazilian states, using for comparison data from a São Paulo study already published. Participants were 1,117 high-ranking police officers. The mean age was 40 years with a standard deviation of 9 and 61% of them were male. It was found that the police officers consider their job to be very stressful and between 43% and 57% exhibited symptoms of stress. The most common symptoms were irritability and feeling constantly tired. The standard of quality of life was found to be poor, primarily with regard to health. The study shows that there is a need for action for organizational change within the civil police institution itself in order to stimulate a change in life habits, as well as the acquisition of coping strategies that can promote a better quality of life among public security personnel in the country.

**Keywords:** Stress; Work; Police

<sup>1</sup> Pos doutorado pelo National Institute of Health - (Diretora e docente do Instituto de Psicologia e Controle do Stress-IPCS).

Instituto de Psicologia e Controle do Stress - IPCS

**Correspondência:**

Marilda E. Novaes Lipp  
Rua Carlos Sampaio, 304 Conj 82 Bela Vista  
01333-020 São Paulo, SP.  
E-mail: mlipp@estresse.com.br

Este artigo foi submetido no SGP (Sistema de Gestão de Publicações) da RBTC e28 de dezembro de 2016. cod. 477.  
Artigo aceito em 14 de junho de 2017.

## METHOD

Interest in the study of occupational stress has been on the rise lately, mainly with regard to the impact it has on workers' health. This has led to greater attention being paid to the effects of occupational stress and psychosocial risks in attempts to establish rules and policies in several countries, such as, for example, in Canada (Duxbury & Higgins, 2012), Luxembourg (EU-OSHA, 2009), the Nordic countries (Hansen, Lidsmoes, Laursen & Mathiassen (2015) as well as in Japan, Sweden, Singapore and Spain, among others (ILO, 2016). Occupational stress not only has deleterious effects on the human body, but can also negatively affect the efficiency of workers and their job satisfaction (WHO, 2011, Santana, v. & Santana, m. 2011).

Although all professions involve some degree of stress, some of them seem to be associated with higher levels of tension, such as that of policemen, which is seen as one of the higher-risk occupations (Souza & Minayo, 2005; Souza et al, 2007; Lipp, 2009; Bezerra, Minayo & Constantino, 2013) since professionals in this area are constantly exposed to danger and aggression (Pinto, Figueiredo & Souza (2013). Due to the characteristics of the job, policemen are strong contenders for occupational stress that could lead to the development of physical disorders such as hypertension, gastroduodenal ulcers and skin diseases, as well as mental disorders such as depression, aggression and even suicide (WHO, 2010; Hartley et al, 2012).

In addition to the health-related aspects, there are serious implications for the community, since studies have shown that stressed policemen tend to employ more use of violence against civilians (Kurtz, Zalava & Melander, 2015). Thus, it is important to treat policemen who develop stress symptoms on the basis of their profession and it is equally important to prevent the development of excessive stress by identifying the occupational stressors they face, in order to reduce the effect they have on the quality of life of these professionals.

A previous study (Lipp, 2009) examined levels of occupational stress, quality of life and work-related stressors among 418 senior police officers in the state of São Paulo, Brazil, showing that high-ranking Brazilian police officers perceive their profession to be very stressful and that 43% of them suffered from significant stress symptoms. The most frequently reported stressor was interaction with other departments within the police force. Quality of life was found to be deficient in the "professional" and "health" areas. The study was the first to show a clear association between high levels of emotional stress and poor quality of life in Brazilian police officers.

Since the study was performed only with policemen in São Paulo, it has become relevant to investigate if the high level of stress and poor quality of life detected among them also occurred in other states.

**Objective:** The objective of the present research was to compare the stress levels and quality of life of senior police officers in other states in Brazil, with those found by Lipp (2009) in the state of São Paulo, in order to obtain a higher power of generalization.

### *PARTICIPANTS*

The sample for the present study consisted of 1,117 high-ranking police officers from four different states, as follows: State A (454 participants), State B (301), State C (192) and State D (170). The participants represented almost all high-ranking senior officers in the police department who participated in a seminar about stress and quality of life. None of them refused to participate in the study. They all signed a consent form. The sample from Sao Paulo state that served as basis for this study included 418 police officers.

### *MEASURES*

In order to be able to compare data, the same instruments were used and the data collected were analyzed using the same procedures as in Lipp's 2009 study.

### *STRESS LEVELS AND ASSOCIATED SYMPTOMATOLOGY*

Stress levels and associated symptomatology were assessed via the Lipp Stress Symptoms Inventory (LSSI) for Adults (Lipp, 2000). The LSSI is composed of different sets of symptoms in accordance with Lipp's (2000) four-phase model (alert, resistance, quasi-exhaustion and exhaustion). LSSI enables an assessment of both cognitive and somatic stress symptoms in terms of the four stress phases. The respondent is asked whether he or she has had a stress symptom (as specified in each chart) in the past day, week or month. Each of the first two sets (alert and resistance) contains 15 items. The third chart, which assesses stress in the exhaustion phase, contains 23 items. Each respondent is asked to assess the occupational stress of his or her job on a scale from 1 to 10 (where 10 = 'extremely stressful' and 1 = 'not stressful'). This stress assessment scale has previously been used in studies of self-perception of occupational stress in 19 professions (University of Manchester, 1987) and judges (Lipp & Tanganelli, 2002).

### *QUALITY OF LIFE*

Quality of life among the respondents was assessed by the Quality of Life Inventory (QLI) (Lipp and Rocha, 1995). The QLI is composed of questions regarding aspects of life in four dimensions: professional, health, social and affective. The replies indicate the quality of life of the person according to the presence of problems in these areas of functioning. It does not attempt to identify the presence of disease, but it does aim to indicate the presence of indicators that could contribute to the development of health problems. For example, it assesses whether a person relaxes or plays sports frequently, or whether he or she has a healthy diet.

### *PROCEDURE*

The Head of the Civil Police Department in each State was contacted to explain the scope of the research. At this time, it

was agreed that a lecture would be given by the researcher to all high-ranking officers attending a training course on stress control. All police officers were expressly invited by the Chief of Police to participate in the study with him. The only officers who did not attend were those involved in emergencies or those on leave; nearly all high-ranking police officers were included in the study. Before the 60-minute lecture, the police officers were invited to answer the questionnaires. It was emphasized that participation was entirely voluntary and anonymous. All attending officers freely agreed to participate and all signed an informed consent form. The questionnaires were distributed and completed as a group, and were collected as soon as the respondents had finished answering them.

The survey in each state was evaluated and approved by the Secretaria Nacional de Segurança Pública (SENASP) in terms of methodological and ethical procedures. The choice of the states was based on the availability of a stress control campaign that was held in these places by the Government. Data collection was the same in all places and it took approximately 12 months to be concluded in the period of 2012-2013.

#### DATA ANALYSIS

In general, chi-square was used to compare the categorical variables between the groups, although Fisher's

exact test was used for values below five. The Mann-Whitney test was used to compare the numerical variables between the groups. To assess internal consistency, Cronbach's alpha coefficient was calculated for ordinal data, and KR-20 was used for dichotomous data. The coefficient values for the instruments used were: LSSI=0.907 and QLI=0.827. To assess the relationships between the main variables and stress, the study used logistic regression analysis (univariate and multivariate models with stepwise selection of variables). To assess the relationships between the main variables, multiple correspondence analysis (MCA) was used.

## RESULTS

The group's demographic characteristics are shown in Table 1. It can be seen that in all states, the number of women in the police force is considerably lower than for their male counterparts, especially in the state of São Paulo, which might reflect a male preference for this type of work. The mean age ( $M=40$ ,  $SD=9$ ) does not vary much across samples.

Table 2 shows the clinical characteristics for the total sample and also by state.

**Table 1.** Demographic Characteristics for Police Officers, by State

Variable	States				
	A	B	C	D	São Paulo 2009 study
<b>Sex in %</b>					
Male	56	62	63	62	80
Female	44	38	37	38	20
Mean Age	40	41	44	37	42
SD	9.6	8.3	10.0	8.5	9.5

**Table 2.** Clinical Characteristics for the Police Officers (PO)

Variable	States				
	A	B	C	D	São Paulo 2009 study
Stage of emotional stress (%)					
No diagnosis of stress (%)	43.0	48.0	57.0	51.0	57.0
Alarm (%)	2.5	2.5	3.0	1.0	3.0
Resistance (%)	40.0	42.8	33.0	40.0	35.0
Quasi-exhaustion (%)	6.4	5.7	6.0	6.0	4.0
Exhaustion (%)	8.1	1.0	1.0	1.9	1.0
% of stressed PO	57.0	52.0	43.0	49.0	43.0
Mean Number of stress symptoms	11	11	11	11	10
Self-perceived stress (scale 1 to 10)	6.6	6.7	7.0	7.0	7.8
Good QL					
Social	69.0	75.0	69.0	78.0	86.80
Affective	59.0	69.0	69.0	75.0	84.27
Professional	37.0	54.0	35.0	49.0	41.08
Health	21.0	29.0	27.0	30.0	45.72

## PREVALENCE OF STRESS AND SYMPTOMATOLOGY

Stress rates, diagnosed using the LSSI, were high for all samples. The findings confirmed those of Lipp (2009) on police officers in the state of São Paulo, that found the **prevalence** of stress in police officers there to be 43%. The **prevalence** of stress varied between 43% in State C and 57% in state A, the mean number of stress symptoms was similar for all samples ( $M=11, SD=9$ ), however some of the policemen had up to 56 symptoms of stress. As in the previous study (Lipp, 2009), the most prevalent symptoms were of the psychological type, such as irritability and anxiety. The most common physical symptom was feeling tired all the time.

The present study revealed, on average, 40% of the participants were functioning within the resistance phase of stress, in which the person still produces, but with difficulty. This means that many police officers must exert above-average effort to deal with stressful factors in their lives, thus confirming the findings from the São Paulo population. Furthermore, approximately 6% of them were living beyond their capacity in the quasi-exhaustion and exhaustion phases. These findings are significant in the context of the demands placed upon police officers with regard to objectivity, emotional control and decision-making. It is known that excessive stress interferes with logical thinking, memory and the ability to make decisions (Klein, Faraday, Quigley & Grumberg, 2004).

It is thus very important for society that stress prevention measures are put in place to assist high-ranking police officers, not only because this will enhance the health status of the individuals concerned, but also because it might promote a better level of policing for the population.

**Perception of occupational stress:** As mentioned by Estelle Morin (2001, 2004), to understand the meaning of the work one performs is an important challenge for administrators, considering the multiple transformations that affect organizations and society in general. Therefore, it is important to check how workers perceive their work. Each respondent rated the stress generated by his or her professional activity on a scale from 1 to 10. The average rate obtained was (6.9,  $SD=2.4$ ). The four groups considered the exercise of their professional activity as stressful, a little less than that quoted by police officers in São Paulo, which was 7.8 ( $SD=2.27$ ). It should be noted that this research involved only high-level officers, in the top echelons of the police force. The recorded rate is probably due to the level of responsibility that research indicates has a negative influence on the occupational stress level (ILO, 2016).

## QUALITY OF LIFE

The QLI revealed that, on average, the percentages of respondents indicating enjoying a good quality of life were: social (72%), affective (68%), professional (43%) and health (27%). These findings differ from the São Paulo sample in that the quality of life index was better in São Paulo in all aspects except the professional area; in that sample only 24% of police

officers reported good levels of quality of life. The difference in health might be explained by the wealth of advanced medical resources available in São Paulo. These resources may be mitigating the deleterious effects of the stress in this population.

## CONCLUSION

The present study confirms the findings of Lipp (2009) insofar as the **prevalence** of occupational stress in police officers in Brazil is very high, affecting between 43% (state C) and 57% (state A) of the police force. This is confirmed by the fact that they perceived their profession to be very stressful. The fact that police officers in São Paulo had the lowest prevalence in the advanced stages of stress and, at the same time, perceived their profession as very stressful, may be explained by the fact that officers in a large city as São Paulo have more readily access to health care facilities and more awareness of the need to seek help when stressed out.

Quality of life of the respondents was unsatisfactory, especially in the area of health, with only 27% of the participants indicating good standard of living in this regard.

The most frequently reported symptoms were irritability and feeling tired all the time. In view of the demands placed on these officers, especially the need for patience when dealing with the public, the irritability reported by these officers is a cause for concern. It is apparent that these police officers would benefit from learning strategies that enable them to relax. The fact that the data from the present study, which included samples from four different states in the country, are very similar to those found in the study in the state of São Paulo (Lipp, 2009), reveals that the occupational stress level is truly high in police officers and that it affects their health.

The study suggests that, considering that high-level police officers must take important stances in terms of the leadership they have to demonstrate, and for that they must think clearly, have self-control and patience, it is important that they receive stress management training and that organizational changes be made to ensure a better quality of life for these professionals and a better service for the public.

## REFERENCES

- Bezerra, C. de M, Minayo, M.C. & Constantino, P. (2013). Occupational stress among female police officers. *Cien Saude Colet.* 18(3): 657-66. Doi:org/10.1590/S1413-81232013000800011.
- Duxbury, L. & Higgins, C. (2012). *Revisiting Work-Life Issues in Canada: The 2012 National Study on Balancing.* Ottawa: Carleton University & The University of Western Ontario.
- EU-OSHA - *European Agency for Safety and Health at Work (2009). OSH in figures: stress at work – facts and figures.* Luxembourg: Publications: Office of the European Union.
- Hansen, T., Lidmoes, L.C., Laursen, P. & Mathiassen, L. (2015). *Psychosocial working environment: Workplace Inspection of the psychosocial working environment in the Nordic countries.* Copenhagen: Nordic Council of Ministers.

- Hartley T.A., Knox, S.S., Fekedulegn, D. et al (2012). Association between depressive symptoms and metabolic syndrome in police officers: results from two cross-sectional studies. *J Environ Public Health*. Vol.2012, doi: 10.1155/2012/861219.
- ILO - International Labour Organization. (2016). *Workplace Stress: a collective challenge*. Suíça:International Labour Office.
- Kurtz, D.L., Zavala, E. & Melander, L.A. (2015).The Influence of Early Strain on Later Strain, Stress Responses, and Aggression by Police Officers. *Criminal Justice Review*, 40: 190-208, doi:10.1177/0734016814564696.
- Lipp, M.E. N. (2000). *O Inventário de Sintomas de Stress para Adultos*. São Paulo: Casa do Psicólogo. ISBN: 85-7396-083-3.
- Lipp, M.E.N. (2009). Stress and quality of life in Brazilian Police Officers: differences in gender. *Spanish Journal of Psychology*.12(2): 593-603. ISSN 1138-7416.
- Lipp, M.E. N., & Rocha, J.C. (1995). *Stress, hipertensão e qualidade de vida*. Campinas: Papyrus.
- Lipp, M. E.N. & Tanganelli, S. (2002). Stress e Qualidade de Vida em Magistrados da Justiça do Trabalho: diferenças entre homens e mulheres. *Revista Psicologia Reflexão e Crítica*, 15(3): 537-548. Doi:org/10.1590/S0102-79722002000300008.
- Klein, L.C., Faraday, M., Quigley, K., S., & Grumberg, N. E. (2004). Gender differences in biobehavioral aftereffects of stress on eating, frustration, and cardiovascular response. *Journal of Applied Social Psychology*, 34(3), 538-562.
- Morin, Estelle M. (2001). Os sentidos do trabalho. *Revista de Administração de Empresas*, 41(3): 08-19. <https://dx.doi.org/10.1590/S0034-75902001000300002>
- Morin, E. (2004) The meaning of work in modern times. Retrieved from [http://web.hec.ca/criteos/fichiers/upload/MOW\\_in\\_MTI-mes\\_EMM200804.pdf](http://web.hec.ca/criteos/fichiers/upload/MOW_in_MTI-mes_EMM200804.pdf)
- Pinto, L.W., Figueiredo, A. E. B., & Souza, E.R.de. (2013). Sofrimento psíquico em policiais civis do Estado do Rio de Janeiro. *Ciência & Saúde Coletiva*, 18(3), 633-644. Doi:org/10.1590/S1413-81232013000300009.
- Santana, V. & Santana, M. (2011). *Costs and impact on productivity in Brazilian industry: Leave of absence due to accidents and work related diseases*. Brasília: SESI.
- Souza E., Franco L.G, Meireles, C.C.; Ferreira, V.T. & Santos. N.C. (2007). Sofrimento psíquico entre policiais civis: uma análise sob a ótica de gênero. *Cad Saúde Pública*.23(1): 105-114.
- Souza, E.R & Minayo, M.C.S. (2005). Policial, risco como profissão: morbimortalidade vinculada ao trabalho. *Cien Saúde Colet*. 10(4): 917-928.ISSN: 1413-8123.
- University of Manchester. Institute of Science and Technology (1987). *Understanding stress: Part II*. London: HMSO.
- World Health Organization (WHO) (2010). *Health Impact of Psychosocial Hazards at Work: An Overview*. Geneva: WHO.
- World Health Organization (WHO) (2011). *Impact of economic crises on mental health*. Copenhagen: WHO Regional Office for Europe.