
Social Support and Success at Stopping Smoking

Sylvia May and Robert West

University College London, United Kingdom

Peter Hajek

Barts and The London, Queen Mary's School of Medicine and Dentistry, United Kingdom

Andy McEwen

University College London, United Kingdom

Hayden McRobbie

University of Auckland, New Zealand

This article characterises the social support received by a large sample of smokers attempting to stop and the relationship between this and the outcome of their attempt. A survey was conducted of 928 smokers attending a group-based program. Smoking among colleagues and a perception of having someone to turn to predicted outcome at the end of treatment, 4 weeks from the quit date (Odds ratio [OR] = 0.81, $p = .008$ and OR = 1.31, $p = .003$ respectively) Among those who abstained for the first week, smoking among colleagues and the frequency with which they had been offered cigarettes predicted outcome at the end of treatment (OR = 0.81, $p = .04$ and OR = 0.73, $p = .01$ respectively). There were no significant social support correlates of cessation for 26 weeks. Social support has a role to play in the short-term, but in the context of a group-based treatment program appears not to be related to long-term success.

Stopping smoking is clearly important for health and it is worthwhile attempting to gain a better understanding of factors that may help or hinder the process. The social environment is potentially relevant in this regard. Two ways in which an individual's social environment may affect his or her attempt to stop smoking are through the smoking behaviour of those around them or through the levels of social support available to them. Social support concerns the availability of encouragement and practical help from other people for the smoker trying to stop. Its converse would involve discouragement and actively undermining their attempt to stop.

A great deal of research has focused on the possible influence of the smoking behaviour of family and friends. Community surveys have found that success in stopping smoking is associated with having a nonsmoking partner (Hanson, Isacson, Janzon, & Lindell, 1990; McBride, Currey, Grothaus, Clark, Lando et al., 1998) and not being exposed to smokers in the household and social environment (Chandola, Head & Bartley, 2004; Mermelstein, Cohen, Lichtenstein, Baer, & Kamarck,

1986; Stevens, Greene, & Primavera, 1982; Warnecke, Flay, Kviz, Gruder, Langenberg, et al., 1991). There have been two recent reports of predictors of cessation among around 2000 smokers attending clinical services in the United Kingdom. They also concluded that having another regular smoker in the household was detrimental to an attempt to stop smoking in both the short- (4 weeks) and long-term (12 months) (Judge, Bauld, Chesterman, & Ferguson, 2005; Ferguson, Bauld, Chesterman, & Judge, 2005, respectively). Hence, it would appear that smoking behaviour of associates might be important. It has been suggested that this could be due to social influences and social cues (Cohen, 1986).

Many authors consider that social support is a key. Marital status is usually examined in this context, although the measure does not consider partner's smoking status and being married does not necessarily imply greater social support. Cross-sectional and prospective population studies have found that people who are married have higher quit rates than people who are divorced, separated or widowed (Chandola et al.,

Address for correspondence: Sylvia May, Health Behaviour Research Centre, Dept of Epidemiology and Public Health, University College London, 2-16 Torrington Place, London WC1E 6BT. E-mail: sivpiv@aol.com

2004; Ferri, 1993; Waldron & Lye, 1989). However, this is not found in the clinical sample described by Judge et al. (2005) and Ferguson et al. (2005). This may reflect a difference in the populations under study.

Turning to the measurement of social support. Researchers have examined both general support and that related to stopping smoking specifically but the evidence here is mixed. Chandola et al. (2004), using data from the British Household Panel Survey (BHPS), examined five different types of general support ranging from instrumental aid to emotional support and determined that perceived social support was predictive of nonsmoking status at follow-up. Other research has shown that the existence of a supportive partner (e.g., Coppotelli & Orleans, 1985; Gulliver, Hughes, & Solomon, 1995 — assessing both general and smoking specific social support) and supportive friends (Morgan, Ashenberg, & Fisher, 1988 — looking at just smoking-specific support) predicts success in stopping smoking. However, there is inconsistency. Digiusto and Bird (1995), for example, found that participants who perceived more social support for quitting at baseline were less likely to be abstinent one week later. Equally, Venters, Kottke, Solberg, Brekke, & Rooney (1990) found that although perceived social support for stopping was correlated with desire to stop at initial interview, it did not predict abstinence 1 year later.

Examination of which behaviours are actually supportive is complex and can be confounded by a range of other factors. However, associations have been found between smoking cessation and supportive behaviours such as talking the quitter out of smoking or expressing pleasure at their efforts to quit; while negative behaviours such as nagging and complaining are associated with relapse (Coppotelli & Orleans, 1985; Mermelstein, Lichtenstein, & McIntyre, 1983).

Attempts to increase levels of support available to a smoker trying to stop have also had mixed results (May & West, 2000; Park, Schultz, Tudiver, Campbell & Becker, 2002). More recently, the current authors found that the addition of a buddy system had no impact on abstinence rates among smokers taking part in group treatment (May, West, Hajek, McEwen, & McRobbie, 2006).

Although aspects of social support have been included as predictor variables in some large population surveys, the majority of clinical studies that have looked at social support in detail have involved only small samples. The current study prospectively examined a large sample of smokers from before their quit date to 26 weeks afterwards. Various aspects of support were assessed, including smoking behaviour of associates, perceptions of support (both before and during the quit attempt) and the smokers' experience of specific supportive behaviours after quitting. Hence, this article examines in detail the type of social support found in the smokers' natural environment and explores the relationship between that and

stopping smoking among a large sample of smokers taking part in group treatment.

Specifically the article aims to examine:

- Baseline levels of support at time of cessation.
- Relationships between support and other baseline characteristics.
- Social support predictors of abstinence at 4 and 26 weeks.
- Social support predictors of subsequent abstinence among smokers who have abstained for one week (these smokers have experience of support during their quit attempt).
- Changes in support during a cessation attempt and support seeking behaviours.

Methods

Design

Participants in this study were taking part in a randomised controlled trial of oral dextrose for smoking cessation (manuscript in preparation). Data were also collected examining the use of a buddy system (May et al., 2006). The data were collected by questionnaire with smokers undergoing the following assessments: screening for eligibility by telephone interview, postal questionnaire, pre-quit visit one week prior to the quit date (visit 1), the quit date visit (visit 2), then visits 1, 2, 3, 4 and 26 weeks after the quit date (visits 3–7). The treatment program involved smokers attending groups that were run according to UK guidelines and so can be considered substantially similar to those run in many clinical services across the United Kingdom and elsewhere.

Sample

The study was conducted at three sites in London and the south east of England. These were all areas of high population density and have smoking prevalence at or above the national average. All the researchers were experienced smoking cessation advisors who had attended the same training program.

A total of 1030 smokers were recruited to 62 groups, 929 attended visit 2 (their quit date). One individual did not re-attend and withdrew consent; hence outcome data was available for 928 participants. The majority of smokers were recruited through the normal channels for National Health Service (NHS) stop smoking clinics (that is general practitioner [GP] referrals) however, they were also recruited through advertisements in local papers and word of mouth. Smokers who were under 18, diabetic, currently smoking less than 10 cigarettes a day, unable to read and write English, or who responded affirmatively to a question that asked whether they had a current psychiatric condition, were excluded. Smokers were also excluded if they reported prior to the quit date that they would be unable to attend all six treatment sessions, or if they expected to leave the area within 12 months.

The sample included 576 (62.1%) women; 631 (69.6%) participants had a partner, 14.5% of whom reported their partner was stopping with them; the mean age was 44.4 years ($SD = 12.5$). Mean daily cigarette consumption was 23.5 ($SD = 9.0$) and mean expired carbon monoxide (CO) concentration on their quit date was 27.4ppm ($SD = 12.9$); the mean Fagerstrom Test for Nicotine Dependence (FTND²⁰) score was 5.8 ($SD = 2.3$). The average number of previous serious quit attempts was 3 ($SD = 4.9$). One hundred and two people did not re-attend on their quit dates. A series of *t* tests were performed comparing those who did or did not attend their quit dates in terms of age, cigarette consumption, CO at first visit, number of serious quit attempts and their Fagerstrom score. The mean Fagerstrom score for smokers who did not attend their quit dates was 6.2 ($SD = 2.1$), this is significantly higher than for those who did, as above ($t(973) = -2.6$; $p = .01$). Men and women were equally likely to re-attend and there were no other differences between groups.

Measures

Demographic and smoking variables, including the Fagerstrom Test for Nicotine Dependence (FTND; Heatherton, Kozlowski, Frecker, & Fagerstrom, 1991) were collected in a postal questionnaire prior to session one. Abstinence was measured (visits 3–6) as follows: ‘Have you smoked at all since the last visit?’ Response options were: *No not even a puff*, *Yes just a few puffs*, *Yes between 1 and 5 cigarettes*, *Yes more than 5 cigarettes*. Subjects were considered to have abstained only if they gave the first response. An expired air CO concentration of less than 10ppm or less than 7ppm above ambient was required to confirm nonsmoking status. For a participant to count as a nonsmoker at a given time point, they had to have reported nonsmoking status at each follow-up to that point, that is they had to be continuously abstinent from their quit date. In the postal questionnaire and on their quit date, participants were also asked: ‘How high would you rate your chances of giving up smoking for good at this attempt’ (response options from 1 ‘*very low*’ to 6 ‘*extremely high*’).

Support items were of three types: smoking behaviour of associates (assessed at the pre-quit visit; visit 1), general perceptions of support (assessed weekly with additional items on their quit date), and experience of specific supportive behaviours (assessed weekly from visit 3).

Smoking behaviour items were as follows: ‘Does your partner smoke?’ (response options: *yes*, *yes but stopping with me*, *no exsmoker*, *no never smoked* or *not applicable*): ‘Including you, how many smokers are there in your household now?’ (with space to include the actual figure): ‘How many of your friends (colleagues) smoke’ (two items with response options: *almost all of them*, *most of them*, *some of them*, *one or*

two of them, *none of them*, *not applicable*). In addition, participants were asked if they knew anyone stopping at the same time as them or if they knew anyone else in the group.

The items regarding general expectations (visit 1+2) and experience (visits 3–6) of support were: in the last week ‘How well supported do you expect to be (feel you have been) by your partner/friends/colleagues/the group’ with response options *not at all* (1) to *extremely* (5) or *not applicable*. They were also asked about their levels of support seeking overall with the item ‘This week did you seek support from someone in your attempt to stop smoking?’ and if so, ‘whom did you ask’ (response options *spouse or partner/friend/family member/someone from group/colleague/other*) and ‘how many times did you seek support?’ At the end of the visit at which they stopped smoking, participants were asked three final questions: ‘To what extent do you feel you have someone to turn to if you find stopping smoking difficult this time?’ ‘To what extent do you feel that someone is relying on you/putting pressure on you to stop smoking this time?’ These items had response options 1 *not at all* to 5 *extremely*.

Participants were asked how often they experienced specific supportive behaviours using items from the shortened Partner Interaction Questionnaire (PIQ-20: Cohen & Lichtenstein, 1990) phrased to include support from all sources. This scale lists various behaviours that may be experienced by smokers attempting to stop and asks the smoker how often they experienced the behaviour from 0 (*never*) to 4 (*very often*). Using the same format, participants were asked an additional four questions. They were: ‘How often did someone smoke a cigarette in front of you/leave their cigarettes with you/offer you a cigarette/commented on any weight gain?’

Procedure

Participants were assessed for eligibility for the glucose study by telephone questionnaire. Eligible smokers were invited to the next treatment group. Prior to the first visit they received a postal questionnaire.

The treatment followed the ‘withdrawal orientated’ model of smoking cessation. This model focuses on mobilising group processes and offering support to smokers during the first four weeks of cessation when the withdrawal symptoms are at their worst (Hajek, 1994). This constitutes usual care for smokers attending groups in clinics in the United Kingdom at this time.

Stop smoking groups were run weekly for a period of 6 weeks and smokers were expected to attend every visit. The first or ‘pre-quit’ visit was an information session in which participants met each other and the researcher. The research (oral dextrose) study and protocol for the groups was explained to them. They were

also reminded that they would be stopping smoking at the following visit.

The second session was their quit date. Most participants used established medication, that is, nicotine replacement therapy or Zyban®. Although some time was spent administering the research, the majority of the session was spent with the group discussing their attempt to stop smoking. The researcher's role was to facilitate discussion, encourage group support and answer questions of fact when they arose. In most of the groups, participants were encouraged to 'buddy up' with someone else in the group. These buddies were then expected to phone each other and offer support between group sessions. The next four visits followed a similar pattern with participants discussing their experience the previous week and their expectations for the following week. Participants were seen individually for a brief period at the start of every session. Research tablets were allocated and their COs measured during this time, expenses of £5 were also issued from visit 3. During this period the group would complete their weekly questionnaires.

If a participant did not attend an appointment, an attempt would be made to contact them by telephone the next day. The participant would be seen as soon as possible and a note made of how late the appointment occurred. If a person could not be contacted or did not attend the new appointment, he or she was assumed to have relapsed to smoking.

Results

Baseline levels of support at the time of cessation

Household smoking. Sixty-eight per cent of participants ($n = 631$) reported having a partner, of whom 362 (57.4%) reported that their partner smoked. One quarter of those ($n = 92$) were planning to stop at the same time. Only 140 (22.2%) reported that their partner had never smoked and 129 (20.4%) reported their partner was an ex-smoker. Forty-eight per cent of participants who responded ($n = 408$) said that there were no other smokers in their household. A further 36% ($n = 307$) reported only one other smoker. The final 16% (131 people) reported two or more smokers in their household (mean of 2.5).

Friends/colleagues smoking. Only 6.8% ($n = 62$) of participants reported that none of their friends smoked and 16% ($n = 150$) reported that almost all of them did. Over a third (35%, $n = 322$) knew someone else stopping at the same time as them and a quarter (26.5%, $n = 231$) knew someone else in the group.

Perceptions of support. Expectations of support were rated from 1 (*not at all*) to 5 (*extremely*). Mean support scores at visit 2 (their quit date) were as follows: support from partner 4 ($SD = 1.2$, $N = 675$), friends 3.7 ($SD = 1.1$, $N = 910$), and colleagues 3.5 ($SD = 1.2$, $N = 759$). A score of 4 corresponds to the label *very*.

Relationship Between Support and Other Baseline Characteristics

There were no differences between the sexes in terms of smoking among friends, their perception of pressure to stop, someone relying on them, someone to turn to, their perceived chances of stopping or their expectations of support from their partner. Women, however, expected more support from friends (chi-squared = 49(4), $p < .001$), colleagues (chi-squared = 37.7(4), $p < .001$) and the group (chi-squared = 21.2(4), $p < .001$).

A series of correlations were then performed to examine the relationships between support and smoking/demographic variables. With such a large sample even very small correlations would be statistically significant so only relationships with correlations above 0.1 are reported as a minimum threshold for a meaningful relationship. Older people tended to report less smoking among their friends ($r = -.142$, $p < .001$, $n = 897$) and expected more support from the group ($r = .135$, $p < .001$, $n = 912$). Age was positively associated with pressure to quit ($r = .153$, $p < .001$, $n = 911$) and a sense that someone was relying on the smoker to do so ($r = .123$, $p < .001$, $n = 904$). Dependence (Fagerstrom score) was independent of support measures, but was positively associated with having friends who smoke ($r = .106$, $p = .001$, $n = 908$).

Confidence in quitting was associated with an expectation of support from all sources ($r = .143$, $p < .001$, $n = 905$ for group; $r = .178$, $p < .001$, $n = 752$ for colleagues; $r = .225$, $p < .001$, $n = 901$ for friends; and $r = .137$, $p < .001$, $n = 669$ for partner). It was also associated with a perception of having someone to turn to ($r = .186$, $p < .001$, $n = 895$).

Social Support Predictors of Abstinence

A total of 327 (35.2%) smokers were continuously abstinent from their quit date until the end of treatment and 130 (14%) were continuously abstinent for 26 weeks. Chi-squared tests indicated that neither gender nor the existence of a partner, or partner smoking status, had any effect on abstinence at the end of treatment or at 26 weeks. Knowing someone else stopping at the same time and knowing someone else in the group had no significant effect at the end of treatment or at the 26-week follow-up. The site the smoker attended and medication use both had a significant impact on outcome at the end of treatment but not by 26 weeks (chi-squared = 9.36(2); $p = .009$ and chi-squared = 15.5(1); $p < .001$ respectively).

A series of Pearson's correlations were performed to assess the relationships between support variables and abstinence. It was found that the number of smokers in the household and feeling under pressure to stop were not correlated with outcome at either time point. Table 1 shows the means, standard deviations (SD) and regression results for correlated items at the end of treatment and at 26 weeks.

Table 1

Mean Scores and Regression Results for Individual Items on Outcome

Variable	Mean (SD)	End of treatment		26 week	
		P value	OR	P value	OR
Fagerstrom score	5.8 (2.3)	< .001	0.87	< .001	0.86
Cigs/day	23.5(9)	< .001	0.97	<i>ns</i>	
Age	44.4 (12.5)	<i>ns</i>		.04	1.02
Postal chances of stopping	4.5 (0.9)	< .001	1.31	<i>ns</i>	
² Friends who smoke	3.1 (1.1)	.005	0.84	<i>ns</i>	
² Colleagues who smoke	2.95 (1.1)	<0.001	0.78	<i>ns</i>	
Expectations of support; friends	3.7 (1.1)	.01	1.18	<i>ns</i>	
Expectations of support; colleagues	3.5 (1.2)	.004	1.21	<i>ns</i>	
¹ Someone relying on you (quit date)	3.4(1.3)	.034	1.12	<i>ns</i>	
¹ Someone to turn to (quit date)	3.7 (1.1)	.001	1.26	<i>ns</i>	
Chances of stopping (quit date)	4.8 (0.9)	< .001	1.34	.018	1.31

Note: Not all the above are interval scales — see measures.

¹ items correlated $r = .423$; $p < .001$; $n = 904$.² items correlated $r = .47$; $n = 739$; $p < .001$.

Items associated with abstinence at the end of treatment were entered into a multiple forward stepwise logistic regression, along with medication use and venue. The results are shown in Table 2.

There were no social support correlates of abstinence for 26 weeks. Fagerstrom score, age and perceived chances of stopping on the quit date were predictive at this point ($p < .001$, OR = 0.857; $p = .019$, OR = 1.02 and $p = .016$, OR = 1.3 respectively).

Social Support Predictors of Continued Abstinence After the First Week

Prior to quitting, smokers' ratings of support are based on their expectations. To examine the impact of a smokers' experience of support on their behaviour it was necessary to re-run analyses using smokers who successfully abstained for the first week and examine their longer term outcome. Four hundred and ninety-nine people (54%) abstained for the first week. Chi-squared analysis indicated that the venue a smoker attended still had a significant impact on outcome at the end of treatment (chi-squared = 11.85(2); $p = .003$), however medication use was no longer significant. The correlations above were also repeated for this group with the addition of items asking about their general experience

Table 2

Summary of Logistic Regression Results for Support Variables With Continuous Abstinence to End of Treatment

Variable	P value	OR
Colleagues who smoke	.008	0.806
Perception of someone to turn to on quit date	.003	1.31

Note: Adjusted for Fagerstrom score, medication use, perceived chances of stopping on the quit date and venue of treatment. Other correlated variables were *ns*.

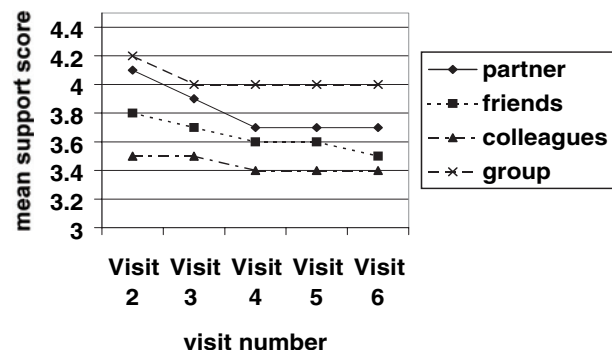
of support during the first week and their experience of specific behaviours. The results are given in Table 3.

As before, items associated with abstinence at the end of treatment (three weeks later) were entered into a multiple forward stepwise logistic regression. The results are shown in Table 4.

Being offered cigarettes in the first week was associated with having more friends and colleagues who smoke ($r = .115$; $p = .012$; $n = 476$ for friends and $r = .230$; $p < .001$; $n = 397$ for colleagues). It was not related to partner smoking status, the smoking status of the participant's closest friend or the number of smokers in their household. Again there were no social support correlates of abstinence at 26 weeks

Changes in Support During Cessation Attempt

Figure 1 shows changes in support over the treatment period. Support was rated from 1 (*not at all*) to 5 (*extremely*). In general, fairly high levels of support were expected and received. The highest levels of support came

**Figure 1:**

Ratings of support by visit for each source of support

Table 3

Mean Scores and Regression Results for Individual Items on Outcome, Selecting Only Smokers who Abstained for the First Week

Variable	Mean (<i>SD</i>)	End of treatment		26 week	
		<i>P</i> value	OR	<i>P</i> value	OR
Fagerstrom score	5.5 (2.2)	.023	0.91	.025	0.90
Cigs/day	22.5(8.6)	.016	0.97	<i>ns</i>	
Age	44.5(12.4)	.03	1.02	.034	1.02
Colleagues who smoke	2.9(1.1)	.001	0.73	<i>ns</i>	
Friends who smoke	3.1(1.1)	.025	0.82	<i>ns</i>	
Experience of support; friends	3.7(1.2)	.015	1.22	<i>ns</i>	
Expectations of support; colleagues	3.5(1.2)	.02	1.24	<i>ns</i>	
Offer a cigarette	0.44(0.9)	.000	0.69	<i>ns</i>	
Smoke in front of you	1.95(1.5)	.01	0.84	<i>ns</i>	

Note: Not all the above are interval scales — see measures.

from the group, then partner, friends and colleagues. Participants received less support than anticipated from all sources except colleagues. However, after the first week there was little change in their experience of support. All analyses included only those who remained continuously abstinent until that point. People who had smoked may have experienced lower levels of support.

Support seeking.

Selecting only those who abstained for the first week, 265 people (53.1%) said that they sought support during this week. Chi-squared analyses showed that seeking support made no difference to outcome at the end of treatment or at 26 weeks. Of those who sought support 132 (49.8%) approached their spouse or partner, 122 (46.0%) approached a friend and 117 (44.2%) approached another member of the group. One hundred and fifty-two (57.4%) approached a family member, a colleague or someone else (people could check more than one box). The mean number of times support was sought was 5.7 (*SD* = 5.96). Number of times support was sought was not associated with outcome at any time point or with a perception of support in the first week.

Discussion

In this study, a perception of someone to turn to and the smoking behaviour of colleagues predicted

smoking cessation in the short term. The existence of a partner, their smoking status or perceptions of partner support had no impact on outcome however. This is contrary to many population surveys, but more consistent with other clinical findings (Ferguson et al., 2005; Judge et al., 2005; McBride et al., 1998). Household smoking also had no impact on outcome in this sample. This is contrary to the UK clinical sample (Ferguson et al., 2005; Judge et al., 2005) and previous population surveys (Chandola et al., 2004). No support items predicted outcome at 26 weeks. Outcome at this point was predicted by dependence, age and their perceived chances of stopping on the quit date.

The authors analysed smokers' ratings of support after one week of experience of smoking cessation. Being offered cigarettes in the first week was predictive of failure by the end of treatment. Other, positively supporting behaviours, such as helping people think of substitutes, complimenting and congratulating the smoker had no impact on outcome. Being offered cigarettes in the first week was associated with smoking among colleagues and friends rather than family, close friends or household smoking.

There was generally a reasonably high level of support reported and among abstainers; support appeared to remain fairly level throughout treatment. It is not known what happened after that, but one might expect it to reduce as time elapses. This could explain the lack of a long-term impact of support. One would not expect significant changes in the make-up of a population of smokers' homes or working environments however.

A limitation of the scales was that items regarding smoking behaviour of the household did not take into account the make-up of the household. Similarly the measurement of partner smoking did not take into account marital/cohabiting status.

The research used a large sample and made broad assessments of exposure to smokers and social support.

Table 4

Summary of Logistic Regression Results for Support Variables With Continuous Abstinence to end of Treatment Among Participants Who Abstained for the First Week

Variable	<i>P</i> value	OR
Colleagues who smoke	.041	0.81
Offered cigarettes in the first week	.014	0.73

Note: Adjusted for venue of treatment. Other correlated variables were *ns*.

However, it took place within a clinic context. This limits the results in that there may be a selection bias and the existence of the group may impact on the smoker's natural resources, both during treatment and afterwards. The high rates of support seeking from another group member and the ratings given for 'support from the group' may reflect this.

These results indicate that support had a role to play in the short term. Partner and household support and smoking appear less important than support and the smoking behaviour of friends and colleagues. Although having an individual (be they family or friend) to turn to was also important. Offering the smoker cigarettes was detrimental to their quit attempt. In the long term 'internal factors' (such as dependence and confidence) were more important than social ones.

References

- Chandola, T., Head, J., Bartley, M. (2004). Socio-demographic predictors of quitting smoking: How important are household factors? *Addiction*, *99*, 770–777.
- Cohen, S. (1986). Role of social support in smoking cessation and relapse. *Health Psychology*, *5*, 81–99.
- Cohen, S., & Lichtenstein, E. (1990). Partner behaviours that support quitting smoking. *Journal of Consulting and Clinical Psychology*, *58*(3), 304–309.
- Coppotelli, H.C., & Orleans, C.T. (1985). Partner support and other determinants of smoking cessation maintenance among women. *Journal of Consulting and Clinical Psychology*, *53*(4), 455–460.
- Digiusto, E., & Bird, K.D. (1995). Matching smokers to treatment: Self-control versus social support. *Journal of Consulting and Clinical Psychology*, *63*(2), 290–295.
- Ferguson, J., Bauld, L., Chesterman, J., & Judge, K. (2005). The English smoking treatment services: One year outcomes. *Addiction*, *100*(2), 59–69.
- Ferri, E. (Ed.). (1993). *Life at 33: The fifth follow-up of the National Child Development Study*. London: National Children's Bureau.
- Gulliver, S.B., Hughes, J.R., & Solomon, L.J. (1995). An investigation of self-efficacy, partner support and daily stresses as predictors of relapse to smoking in self-quitters. *Addiction*, *90*, 767–772.
- Hajek, P. (1994). Helping smokers to overcome tobacco withdrawal: Background and practice of withdrawal orientated therapy. In Richmond R. (Ed.), *Interventions for smokers an international perspective* (pp. 29–46). Baltimore, MD: Williams and Wilkins.
- Hanson, B.S., Isacson, S.O., Janzon, L., & Lindell, S.E. (1990). Social support and quitting smoking for good. Is there an association? Results from the population study, 'men born in 1914', Malmo, Sweden. *Addictive Behaviors*, *15*, 221–233.
- Heatherton, T., Kozlowski, L., Frecker, T., & Fagerstrom, K. (1991) The Fagerstrom Test for Nicotine Dependence: A revision of the Fagerstrom Tolerance Questionnaire, *British Journal of Addiction*, *86*, 1119–1127.
- Judge, K., Bauld, L., Chesterman, J., & Ferguson, J. (2005). The English smoking treatment services: Short term outcomes. *Addiction*, *100*(2), 46–58.
- May, S., & West, R. (2000). Do social support interventions ('buddy systems') aid smoking cessation? A review. *Tobacco Control*, *9*(4), 415–422.
- May, S., West, R., Hajek, P., McEwen, A., & McRobbie, H. (2006). Randomized controlled trial of a social support ('buddy') intervention for smoking cessation. *Patient Education and Counselling*, *64*, 235–241.
- McBride, C.M., Currey, S.J., Grothaus, L.C., Clark, J., Lando, H., & Pirie, P.L. (1998). Partner smoking status and pregnant smoker's perceptions of support for and likelihood of smoking cessation. *Health Psychology*, *17*(1), 63–69.
- Mermelstein, R., Cohen, S., Lichtenstein, E., Baer, J., & Kamarck, T. (1986). Social support and smoking cessation and maintenance. *Journal of Consulting and Clinical Psychology*, *54*(4), 447–53.
- Mermelstein, R.J., Lichtenstein, E., & McIntyre, K.O. (1983). Partner support and relapse in smoking cessation programs. *Journal of Consulting and Clinical Psychology*, *51*, 456–466.
- Morgan, G.D., Ashenberg, Z.S., & Fisher, E.B. (1988). Abstinence from smoking and the social environment. *Journal of Consulting and Clinical Psychology*, *56*(2), 298–301.
- Park, E.W., Schultz, J.K., Tudiver, F., Campbell, T., & Becker, L. (2002). Enhancing partner support to improve smoking cessation (Cochrane Review). In: *The Cochrane Library*, Issue 2. Oxford: Update Software.
- Stevens, P.A., Greene, J.G., & Primavera, L.H. (1982). Predicting successful smoking cessation. *Journal of Social Psychology*, *118*, 235–241.
- Venters, M.H., Kottke, T.E., Solberg, L.I., Brekke, M.L., & Rooney, B. (1990). Dependency, social factors and the smoking cessation process: The doctors helping smokers study. *American Journal of Preventive Medicine*, *6*, 185–193.
- Waldron, I., & Lye, D. (1989). Family roles and smoking. *American Journal of Preventive Medicine*, *5*, 136–141.
- Warnecke, R.B., Flay, B.R., Kviz, F.J., Gruder, C.L., Langenberg, P., Crittenden, K.S. et al. (1991). Characteristics of participants in a televised smoking cessation intervention. *Preventive Medicine*, *20*, 389–403.