

THE IMPACT OF PURCHASING FIRM FORMALIZATION
ON PURCHASING MANAGER COMPLAINT BEHAVIOR

Lynn R. Godwin
University of St. Thomas
3800 Montrose Blvd.
Houston, TX 77006

713.525.2119 office
281.480.0534 home
281.221.3143 cell

godwin@stthom.edu
lynnbob@lynngodwin.net

Abstract

A national sample of purchasing managers was surveyed with regard to their complaint behavior following a focal event involving dissatisfaction with a vending firm. The level of formalization present in the purchasing firm (as measured by the subscales of autonomy and surveillance) was measured and correlated with various outcomes relative to the focal event. Surveillance (the extent to which workers were observed for violations of rules) was found to be significantly associated with several outcomes which stemmed from the focal complaint event. Autonomy (the extent to which a job necessitates the consultation of rules for performance), however, was not related to any measured outcomes.

The Impact of Purchasing Firm Formalization on Purchasing Manager Complaint Behavior

The role of a firm's level of formalization in industrial buyer complaint behavior is, at best, poorly mapped out. With this in mind, this study attempts to shed some light (in an exploratory sense) on this organizational characteristic. As a start along this path of learning, the extent to which a purchasing manager's complaint behavior is impacted by the level of formalization present in the purchasing firm is investigated with regard to the extent to which it is related to various outcomes of the complaint behavior process. These outcomes include interpersonal relationship variables (interpersonal solidarity and hostility), future intentions variables (complaint intentions and repurchase intentions), expectations, satisfaction, and retained anger.

Formalization

Formalized procedures for complaint handling may leave little room for individual factors to have an impact upon the complaint process. The possibility exists, therefore, that the extent to which rules of complaint handling are formalized may have a significant impact on purchasing managers actions given an episode of dissatisfaction. The marketing literature, unfortunately, has provided little empirical research on the concept of formalization as it relates to industrial buyer complaint behavior.

Trawick and Swan (1982), for example, posited a relationship between formalization and the prevalence of complaining in industrial markets (as opposed to consumer markets), although no empirical examination of such a relationship was attempted. They noted that "the common occurrence of industrial buyer complaints is probably prompted by official or unofficial policy regarding complaints" (p. 83).

One of the few studies which utilized the construct of formalization as it relates to industrial buying was conducted by Michaels et al. (1988). This research was of limited scope, however, and provided no examination of the effects of purchasing firm formalization on complaint behavior.

Within the current study, an operational definition of formalization corresponding to that discussed by Aiken and Hage (1966) was utilized. Aiken and Hage defined formalization as "the degree of work standardization and the amount of deviation that is allowed from standards" (p. 499). Aiken and Hage viewed formalization as a multidimensional construct. Two subscales, job codification and rule observation were developed. Job codification "reflects the degree to which job incumbents must consult rules in fulfilling professional responsibilities" (p. 502) while rule observation "reflects the degree to which employees are observed for rule violations (p. 502).

Dewar, Whetten, and Boje (1980) in an analysis of the reliability and validity of Aiken and Hage's scales noted that the rule observation scale might be better termed "surveillance" (p. 127). Furthermore, the authors felt that a better name for the job codification construct was

“autonomy” (p. 127). For the purposes of this study, therefore, Dewar, Whetten, and Boje’s terminology will be utilized as it seems to be descriptively precise and is inherently easy to understand conceptually.

Purchasing managers are often seen as professional in their purchasing behavior (and, it can be assumed, in their complaint behavior relating to these purchases). This may, however, not be an ingrained personality characteristic. Instead, it may depend on their level of autonomy in reacting to episodic dissatisfaction as well as the surveillance of their complaint handing activities and actions.

Since the structure of the purchasing function is within the control of a given firm, structural changes in the formalization of the purchasing function might yield benefits to the firm if the surveillance and autonomy constructs are indeed related to outcomes from the complaint process. With this in mind, this study seeks to compare the outcomes (subsequent to the industrial buyer complaint behavior process) with the level of formalization within purchasing firms. This formalization will be measured utilizing Aiken and Hage’s (1966) scales of surveillance (rule observation) and autonomy (job codification).

Complaint Outcomes

The outcomes from the complaint process may be both negative and positive. In essence, the relationship between purchasing managers (and, consequently their firms) and vendors may be solidified or damaged during this process. In order to ascertain the possible connection(s) between a purchasing manager’s experienced level of formalization and outcomes surrounding the complaint process the following variables (briefly discussed below) will be examined.

Interpersonal Relations

Purchasing managers are likely to have multiple interactions with sellers and vendors over a period of time. Relationships are, therefore, likely to be established between buyers and sellers at a level not seen (for the most part) in consumer markets. In point of fact, Arndt (1979) noted that selecting firms with which to enter into long-term relationships is much the same as the selection of marital partners. This relational (as opposed to transactional) view of the continued interactions between a purchasing manager and a seller may be seen as a “marriage” focused on commerce.

With this in mind, it was decided to utilize modified questions and dimensions gleaned the family/marital relations literature (e.g., Moos and Moos 1981). These dimensions included Interpersonal Solidarity (measuring the strength and cohesiveness of the relationship) and Interpersonal Hostility (measuring residual anger within the relationship).

The following hypothesis was, therefore proposed:

- H1: Strength of the interpersonal relationship (*Interpersonal Solidarity* and *Interpersonal Hostility*) will vary significantly with the level of formalization (*Autonomy* and *Surveillance*) present within the buying firm.

Expectations and Satisfaction

Expectations regarding the complaint process and the achievement of outcomes from the process may be responsible, at least in part, for whether consumers complain. These expectations may subsequently affect consumers' satisfaction. Similarly, industrial buyers have evidenced satisfaction with the complaint process if the complaint was handled in a manner that resulted in the buyer receiving what was wanted (Trawick and Swan, 1981).

In the industrial marketplace, industrial buyers may be required (by formalized procedures) to complain...and to complain in a specific fashion. Buyers may be limited in what they can do or they may be required to engage in specific complaint actions. In either case, it does not take a great leap of faith to propose that satisfaction with the complaint process (and the outcome of this process) might be related to purchasing firm formalization.

To begin with, a purchasing manager may be forced to take actions that he or she finds uncomfortable. This may be especially true if he or she has an established relationship with the vendor. This, in turn, may lead to dissatisfaction with the process. On the other hand, the purchasing manager may be inhibited from taking actions that he or she may find appropriate. This may also lead to a degree of dissatisfaction with the process. In either event, the satisfaction with the process may be higher if the purchasing manager is left with the flexibility to handle things in a less formalized manner.

The following hypotheses were, therefore proposed:

- H2: *Confirmation of Expectations Regarding the Complaint Process* will vary significantly with the level of formalization (*Autonomy* and *Surveillance*) present within the buying firm.
- H3: *Satisfaction with the Complaint Process* will vary significantly with the level formalization (*Autonomy* and *Surveillance*) present within the buying firm.

Complaint Intentions

A lack of reinforcement for industrial buyers subsequent to any complaint behavior which they exhibit may, logically, lead to different complaint behaviors in the future. Buyers may then begin to handle their complaints in less overt (e.g., "bad-mouthing" to friends, relatives, and coworkers) but equally damaging ways. The situation may become more problematic in that sellers may not be aware of how dissatisfied buyers (and their firms) really are.

Trawick and Swan (1982) noted that "the magnitude of consumer dissatisfaction will be greatly understated if the marketer relies on voiced complaints...thus, it may pay to encourage complaining and open channels of communication for complaints" (p. 83). This is likely to hold for industrial markets as well as for consumer markets. It may be that the dissatisfied purchasing manager who is seen and heard is better than the invisible, yet dissatisfied one

With regard to formalized firms, however, the purchasing manager may have less choice in his or her future complaint actions. Indeed, such actions may be explicitly dictated by company policy. The purchasing manager's lack of autonomy may inhibit complaining in a different manner in the future no matter what the outcome of the complaint. An increased level of formalization, therefore, may well result in little change in complaint behaviors over time and across outcomes. Less formalized firms, on the other hand, may well be associated with intentions to complain in a different manner if and when future complaints arise.

The following hypothesis was, therefore proposed:

H4: *Intentions to Complain in a Similar Manner* in the future will vary significantly with the level of formalization (*Autonomy* and *Surveillance*) present within the buying firm.

Retained Anger and Hostility

Kaufmann and Stern (1988) noted that anger and hostility might remain after a dispute if one party judged the other party's behavior as unfair. This hypothesized direct relationship between unfairness and retained sentiments of anger and hostility was supported empirically.

It may be argued that, in addition to unfairness (as judged by the purchasing manager), formalization may come into play. If a purchasing manager lacks the autonomy to behave in a way that he or she feels may result in an appropriate resolution of the issue then it is not unreasonable to expect a bit of residual anger. Likewise, if surveillance of the purchasing manager's performance related to the complaint is extensive, the same residual anger might be expected. In the current research, a hypothesized relationship between formalization and retained sentiments of anger and hostility, therefore, seems warranted.

The following hypothesis was, therefore proposed:

H5: *Levels of Retained Anger and Hostility* will vary significantly with the level of formalization (*Autonomy* and *Surveillance*) present within the buying firm.

Repurchase/Relational Intentions

Trawick and Swan (1981, 1982) noted that there was a significant relationship between response to industrial buyers' complaints and future reordering (and reordering intentions). Satisfaction, in the case of Trawick and Swan's research, was operationalized as the extent to which an actual response corresponded with the desired response (on the part of the vendor). They found that 78 percent of the respondents who were satisfied or neutral (with regard to the handling of the complaint process) reordered from the same supplier.

Formalization within a given purchasing firm might be explanatory, at least to some extent.

Perhaps formalized firms are locked into repurchasing unless certain specific actions occur. With less autonomy (and more formalization) a purchasing manager might have little choice but to repurchase from the vending firm. Alternatively, the ending of a relationship with a vendor over complaint issues might also not be under the purchasing manager's control in an extremely formalized environment

The following hypothesis was, therefore proposed:

H6: *Intentions to Repurchase and to Remain in the Relationship* with the vendor will vary significantly with the level of formalization (*Autonomy* and *Surveillance*) present within the buying firm.

Relational Satisfaction

Finally, relational satisfaction was hypothesized to be affected by satisfaction with the complaint outcome and process. It seems inherently logical that intentions to repurchase or remain in the relationship would be a similar construct to satisfaction with the buyer-seller relationship. In addition, higher levels of formalization may be likely to, as previously mentioned, force maintenance of a relationship or the dissolution of same (regardless of the purchasing manager's personal feelings).

The following hypothesis was, therefore proposed:

H7: *Satisfaction with the Relationship* with the vendor will vary significantly with the level of formalization (*Autonomy* and *Surveillance*) present within the buying firm.

Methodology

Exploratory depth interviews were conducted with ten purchasing managers. These interviews were utilized in the development and specification of the structured questionnaire utilized in this study.\

After these interviews, a pilot questionnaire was developed. This questionnaire was mailed (in a single wave) to 120 purchasing managers. Of the questionnaires mailed, 20 were returned for a 16.7 percent response rate. Information from the pilot study was also utilized in revising the questionnaire.

The main phase of the research was conducted by using a mail survey. Two waves of questionnaires (approximately four weeks apart) were directed to a national sample of 2,000 purchasing managers. A total of 317 usable questionnaires were returned for a 15.9 percent response rate.

The subjects were asked to recall a focal supplier (i.e., their third or fourth largest supplier).

Such a methodology precluded respondents from focusing only on their largest customers, where, as Anderson and Narus (1990) noted, "working relationships tended to be uniformly positive" (p. 46). Such positive responses would only create a problem with restriction of response range.

The subjects were then asked to think of a recent "critical incident" of dissatisfaction with a product or service involving the focal supplier. Subjects answered a battery of questions relating to the actions they took in response to this dissatisfaction

Analysis

The psychometric properties of most scales were established utilizing a two-part methodology. A factor analytic model was utilized in establishing the dimensionality of each scale or group of scales. A principal components (PC) methodology was utilized with an orthogonal (VARIMAX) rotation.

After the factor analyses, the reliabilities of the various scales were established by utilizing a measure of internal consistency, Cronbach's alpha (Cronbach 1951). Items with low item-total correlations (less than .35) were eliminated from the various scales.

Formalization

The construct of formalization was measured utilizing scales constructed by Aiken and Hage (1966). The seven-item Likert-type scale measures two dimensions of formalization. The first dimension represents the extent to which a job necessitates the consultation of rules for performance. Aiken and Hage (1966) termed this the index of job codification (*Autonomy*). The second dimension reflects the extent to which workers are observed for violations of rules. This two-item measure is termed the index of rule observation (*Surveillance*). Aiken and Hage noted that in their use of the instrument, the two aspects of formalization were not related.

Two clear factors resulted from the factor analysis. Loadings on these two factors corresponded to the dimensionality proposed by Aiken and Hage (1966).

In addition to factor analysis, reliability analyses were conducted. Unfortunately, Aiken and Hage (1966) failed to report coefficient alpha from their work. However, the reliabilities in the current study for both *Autonomy* (alpha = .78) and *Surveillance* (alpha = .82) indicated sufficient levels of reliability.

Interpersonal Relations

Interpersonal relations were measured through the use of original items as well as items presented in the marital and family relations literature (e.g., Moos and Moos 1981).

The initial factor analysis yielded a two-factor structure that was interpretable. Termed *Inter-*

personal Solidarity and *Interpersonal Hostility*, these constructs present as a face-valid representation of the underlying factor structure. Subsequently, each of the two constructs was subjected to reliability analysis. The two scales had good reliability levels with *Interpersonal Solidarity* ($\alpha = .95$) exceeding *Interpersonal Hostility* ($\alpha = .79$).

Confirmation of Expectations

Bearden and Teel (1983) utilized a single-item measure of disconfirmation of expectations. In the present study, the extent to which expectations relating to the complaint response were met or not met was measured by a single Likert-type item. The exact wording of the question was: "How close was the supplier's actual response to your desired response?" The seven-point Likert-type item was bounded by "Not Very Close" on the low end and "Very Close" on the high end.

Satisfaction with Complaint Process

Satisfaction with the Complaint Process was measured with an eight-item Likert-type scale with poles labeled "Very Dissatisfied" and "Very Satisfied".

Of the eight items, six were original. The remaining two items originated with Trawick and Swan (1981) where satisfaction was measured with only these two items.

In order to psychometrically evaluate this new scale, factor analysis was conducted. The results from this analysis reveal a one-factor construct of process satisfaction. Following the factor analysis, a reliability assessment of the scale was made. From this analysis, the reliability of the scale ($\alpha = .94$) was deemed acceptable.

Retained Anger and Hostility

Retained Sentiments of Anger and Hostility were measured utilizing a scale developed by Kaufmann and Stern (1988). This four-item Likert-type scale, bounded by "Strongly Disagree" and "Strongly Agree," was augmented by two additional items.

Factor analysis of the scale resulted in a single factor structure. Subsequent reliability analysis resulted in the deletion of two items with low item-total correlations. The purified four-item scale had reliability ($\alpha = .86$) comparable to that in Kaufmann and Stern's (1988) work ($\alpha = .81$).

Future Intentions

Respondents' future intentions relative to relationship maintenance and repurchase, as well as complaining behaviors, were measured by eight Likert-type items. These items were bounded by "Very Unlikely" and "Very Likely".

Factor analysis yielded two distinct factors: the first factor measuring repurchase and relational intentions, the second factor measuring complaint intentions. Items loaded clearly except for a single item which was deleted from subsequent analyses. Reliability analysis, focusing on the

seven remaining items provided an alpha of .7377 for *Intentions to Repurchase* and a correlation of .5867 between the two *Intentions to Complain in a Similar Manner* items.

Relational Satisfaction

Relational satisfaction was measured utilizing a modified version of Ruekert and Churchill's (1984) SATDIR scale. This ten-item Likert-type scale (bounded by "very dissatisfied" and "very satisfied") was modified for the current research and utilized as the measure of *Relational Satisfaction*.

Ruekert and Churchill (1984) noted three separate dimensions for their measure of relational satisfaction. A single, uni-dimensional construct, emerged when factor analysis was performed on the altered items utilized in the present study.

Ruekert and Churchill (1984) reported reliabilities for two of the three dimensions in their scale: "social interaction" (alpha = .70) and "other assistances:" (alpha = .75). The final two-item subscale, "product," had no reliability (or correlation coefficient) reported. The uni-dimensional scale utilized in the current study produced an alpha of .8856, which compared favorably with those of Ruekert and Churchill.

Findings

Correlational analyses were performed in order to ascertain whether or not any statistically significant associations existed between firm formalization and the outcome variables of interest. Results from the analyses are presented in Table 1.

Table 1

Results

	Outcomes	Autonomy	Surveillance	
H1:	Interpersonal Solidarity	-.0115	-.0611	
H1:	Interpersonal Hostility	.0067	-.1481	**
H2:	Confirmation of Expectations re: Process	.0295	-.1371	*
H3:	Satisfaction with Process	.0077	-.1646	**
H4:	Intentions to Complain in a Similar Manner	.0154	-.1142	*
H5:	Retained Anger and Hostility	.0060	.1253	*
H6:	Intentions to Repurchase	-.0247	-.1057	
H7:	Satisfaction with the Relationship	.0412	-.1282	

*	Sig < .05			
**	Sig < .01			

To begin with an inspection of the results does not support any of the hypotheses with regard to *Autonomy*. There was no statistically significant relationship between Job Codification (Autonomy) and any of the outcome variables.

On the other hand, several of the hypotheses were supported with regard to *Surveillance*. *Interpersonal Hostility* evidenced a significant negative correlation with *Surveillance*. In essence, purchasing managers who reported more observation of their work tended to evidence statistically significantly lower levels of *Interpersonal Hostility*. Thus, Hypothesis 1 was supported for *Surveillance*.

Confirmation of Expectations Regarding the Process evidenced a significant negative correlation with *Surveillance*. In essence, purchasing managers who reported more observation of their work tended to evidence statistically significantly lower levels of confirmation of expectations. Thus, Hypothesis 2 was supported for *Surveillance*.

There was also a statistically significant relationship between *Satisfaction with the Process* and *Surveillance*. Purchasing managers who reported statistically significantly lower levels of rule observation reported higher levels of satisfaction. Hypothesis 3 was, therefore, supported for *Surveillance*.

Surveillance was also negatively associated with *Intentions to Complain in a Similar Manner* in the future. Hypothesis 4 was, therefore, supported by the findings.

Hypothesis 5 was also supported in that *Surveillance* was positively associated with *Retained Anger and Hostility*. Those purchasing managers who reported a higher level of observation of their behaviors also reported higher levels of retained anger.

Finally, *Intentions to Repurchase* and *Satisfaction with the Relationship* were not statistically significantly associated with *Surveillance*. Hypotheses 6 and 7 were, therefore, not supported.

Conclusions

From the results, it seems that further analysis of the relationship between the outcomes of a dissatisfactory purchase experience (resulting in complaint behaviors) and the level of formalization within a given purchasing firm is warranted.

To begin with, formalization is characterized (in part) by the extent to which a purchasing manager must consult a set of rules (*Autonomy*) relating to appropriate performance. The presence of such a set of policies and procedures does not (at least in this study) evidence any impact on the measured outcome variables.

The extent to which workers are observed for violations of rules (*Surveillance*) was, however, statistically significantly related to a variety of outcome variables. With regard to *Interpersonal Hostility*, it could be argued that purchasing managers have lower levels of such hostility due to the fact that they are afraid (due to increased levels of supervision regarding rules of engagement) to evidence such hostility. On the other hand, it likewise could be argued that an adherence to rules (again due to supervisory concerns) distances purchasing managers from the process to such an extent that personal hostility is minimized (regardless of the outcome from the complaint process). In essence, they may not take things personally. *Interpersonal Solidarity*, however, was not associated (significantly) with formalization.

Retained Sentiments of Anger and Hostility, on the other hand, were significantly associated in a positive direction with increased *Surveillance*. The supervision that forced rule adherence in purchasing managers may have, indeed, served the additional function of inhibiting cathartic responses of anger (on the part of purchasing managers). It could be that this anger, which had no appropriate outlet given the purchasing managers' adherence to rules, resulted in an internalization and retention of negative feelings.

Similarly *Satisfaction with the Process* was negatively statistically significantly associated with *Surveillance*. Higher levels of rule observation were associated with negative levels of satisfaction. Perhaps, again, purchasing managers were inhibited and felt unable to take actions which might have resulted in higher levels of satisfaction. *Confirmation of Expectations Regarding the Process* might also have been impacted in a similar fashion.

Intentions to Repurchase was not statistically significantly associated with either *Autonomy* or *Surveillance*. Other factors such as environmental munificence or contractual obligations may have minimized the role of formalization here.

No statistically significant association was found between *Satisfaction with the Relationship* and formalization.

Further (more rigorous) analysis and research is, therefore, warranted. There seems to be some relationship between firm formalization and some of the outcome variables (from the complaint behavior process) measured in this study. It could be that the main outcomes of higher levels of *Surveillance* relate to interpersonal hostility and retained anger. Perhaps by limiting the actions a purchasing manager may take, firms are forcing the managers to internalize (or live with) their own sense of anger and/or frustration related to such incidents.

In any case, supervision will result in the purchasing manager following procedures. All the rules and policies in the world will matter little unless the purchasing manager is supervised. "Trust your purchasing managers...but look over their shoulders" may well be the watchword...at least as far as complaint handling is concerned.

References

Aiken, M. & Hage, J. (1966). Organizational alienation: A comparative analysis, *American*

Sociological Review 31 (August), 497-507.

Anderson, J. C. & Narus, J. A. (1990), A Model of Distributor Firm and Manufacturer Firm Working Relationships, *Journal of Marketing*, 54 (January), 42-58.

Arndt, J. (1979), Toward a concept of domesticated markets, *Journal of Marketing* 43 (Fall): 69-75.

Bearden, W. O. & Teel, J. E. (1983), Selected Determinants of Consumer Satisfaction and Complaint Reports, *Journal of Marketing Research*, 20 (February), 21-28.

Cronbach, L. J. (1951), Coefficient Alpha and the Internal Structure of Tests, *Psychometrika*, 16 (September), 297-334.

Dewar, R. D., Whetten, D. A., & Boje, D. (1980), An Examination of the Reliability and Validity of the Aiken and Hage Scales of Centralization, Formalization, and Task Routineness, *Administrative Science Quarterly*, 25, 120-128.

Kaufmann, P. J. & Stern, L. W. (1988), Relational exchange norms, perceptions of unfairness, and retained hostility in commercial litigation, *Journal of Conflict Resolution* 32 (September): 534-52.

Michaels, R. E., Cron, W. L., Dubinsky, A. J., & Joachimsthaler, E. A. (1988), Influence of Formalization on the Organizational Commitment and Work Alienation of Salespeople and Industrial Buyers, *Journal of Marketing Research*, 25 (November), 376-383.

Moos, R. & Moos, B. (1981), *Family Environment Scale Manual*. Palo Alto, CA: Consulting Psychologists Press.

Trawick, I. F. & Swan, J. E. (1981), A Model of Industrial Satisfaction/Complaining Behavior, *Industrial Marketing Management*, 10, 23-30.

Trawick, I. F. & Swan, J. E. (1982), Complaint Behavior by Industrial Buyers: Buyer Roles and Organizational Factors, *Proceedings: Southern Marketing Association*, 81-83.